

ALBATROSS

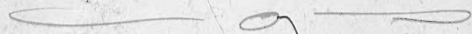
20001

to

20049

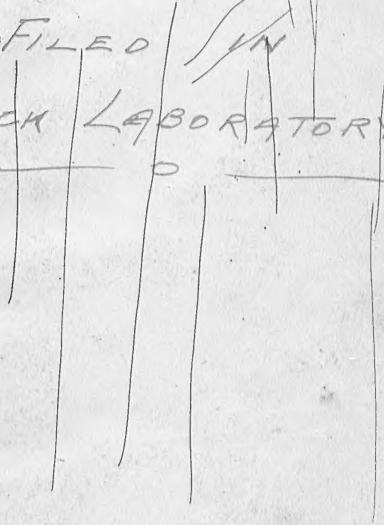
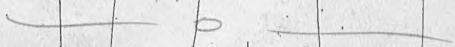
1919-20

1645.1	16.45	548.6
18.2	365	914
16641	1681	164
1828		656.4
914	1097	
91	164	914.4
9	29	73
2842	1270	9
		996



CHARTS FOR
GULF OF MAINE
CRUISE

FILED IN
BACK LABORATORY.



225
447
181

1919

Dear

REMARKS: Shot to air - 41 pm. 11-6314
Snapper lead, bent on to heaving line,
was used for sounding.

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Bottom net	near Bottom	PM 3:25	PM 4:00	40-45 RV
meter net 63m	5-0m		3:55	
1/2 m. net } surf		3:27	3:32	
#20 tow net }		3:30	3:50	
35' shrimp trawl		4:35	4:53	
200 ft + 2 pins + (ca) 100 fms				

11-5314

NOTES

Bottom meter nets towed 30 min. cable out 100 m.
Surf nets towed 20 min

35 ft trawl towed 15 min.
cable out (bottom not reached)

Station No. *C 20002* Date: *Oct 30* 191

Hour: *8 PM* . M. to *9.20 P* . M.

Position: Lat. *36° 47' N* Long. *75° 6' W*

Locality:

Chart C & GS 1001

Depth: *31 m* Bottom: *Sand & shell* Sample: *no*

Wind: Direction, *calm* Force, *Air 67 = 19.44C*

Sea: *Smooth* Sky: *clear*

TEMPERATURES

Depth meters	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
<i>0</i>	<i>Tycos 1</i>	<i>20.8</i> <i>69.5</i>			<i>21.8</i>	<i>✓</i>	<i>GB</i>
<i>15 m</i>	<i>11155</i> <i>11153</i>	<i>17.25</i>	<i>19</i>	<i>-04</i>	<i>17.21</i>	<i>✓</i>	
<i>30 m</i>	<i>11154</i> <i>11157</i>	<i>16.30</i>	<i>19</i>	<i>+07</i>	<i>16.23</i>	<i>✓</i>	

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11-5314

5 snapper lead but on to a heaving line, was used for sampling.

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Vertical $\frac{1}{2}$ m. ✓	30-0	PM		
Bottom net ✓	30-0	8.50	9.20	
$\frac{1}{2}$ m net 0 ✓		25 min.		
20 net 0 ✓		25 min.		

11-5314

NOTES

Very rich vertical haul.

Rich micro haul

Silt in $\frac{1}{2}$ m surface.

Rich haul "young fishes in bottom net"

191

Hour: 12.01 P.M. to 1.30 A.M.

Position: Lat. $36^{\circ} 45' N$ Long. $74^{\circ} 41' 30'' W$

Locality:

Depth: 40 fms Bottom: Sand & shell Sample: —

Wind: Direction,

Force,

$$\Delta T = 19.44^\circ\text{C}$$

Sea: smooth

Sky:

TEMPERATURES

Depth meters	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
	B.S. #	12.8					6B
0	Tycos 1	64			12.8		
10	11153	17.85	19	-.03	17.82	✓	
	11155						
20	11157						
30	11154	16.60	19	-.07	16.53	✓	
40	11156						
50	11157	10.18	19	-.22	9.96	✓	
70	11152	11.10	19	-.17	10.93	✓	
	11161						

CURRENTS

[illegible]

Color of water:

Transparency:

REMARKS:

11—5314

REMARKS: Snapper lead used in pouring
Electric edgework

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Vertical net ✓	90-0	AM		
Bottom net (100m out)	75-0	1 hr.	1.30	
1/2 m net ✓	0-0	20 min		
20 net ✓	0	20 min		

11-5314

NOTES

Bottom net rich haul salpae and young fishes.

1/2 m surface - mostly salpae

Vertical haul abundant

20 net, Scanty micro

18.20

14.80

21.8

72.15
14.60
87.75

Station No. 20004 ✓ Date: Oct-31st 1919

Hour: 3 A.M. to 6 A.M.

Position: Lat. $36^{\circ} 41' 00''$ N Long. $74^{\circ} 34' 30''$ W

Locality:

Depth: 336 m Chart CG 65 104 Sand
Bottom: green mud Sample: 1/100
from mud

Wind: Direction, Force, *light*
 $Air = 67 = 19.44^{\circ}C$

Sea: Smooth Sky: Clear

TEMPERATURES

Depth meters	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
		17.8					GB
0	Jyer 1	64			17.8	✓	
10	53	17.90	19	-.07	17.87	✓	
	55						
50	54	11.05	19.5	-.16	10.89	✓	
	57						
100	11154	11.35	16	-.09	11.26	✓	
	11157	11.30	16	-.24	11.06	✓	
150	53	12.10	18	-.11	11.99		
	55					✓	
200	11154						
	11157	11.40	16.5	-.25	11.15	✓	
250	11152	7.80	16	-.16	7.64	✓	
	11161	7.90	18	-.27	7.63	✓	

CURRENTS

[illegible]

Color of water: Transparency:

REMARKS: Sounded with electric
sounder + snapper lead.

11—5314

1100
000
305

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Vertical haul ✓	200-0	AM		
wind bag -	bottom			
Bottom net 200-0	5-15 AM	5:45		
20 net ✓	0	} 30 min		
1/2 hr net ✓	0			

11-5314

NOTES

Gulfweed.
Vertical haul rich.
Plankton more scanty
more *Uca* & *Libinia*

0
10.0
50

Station No. *1100* Date: *Oct 25 1911*
 Hour: *7:30 A.M. to 3:30 P.M.* *7:30 A - Noon Drift S 38 W 6 mi*

Position: Lat. *36° 37' 30" N* Long. *74° 23' 30" W*
12:58 PM From 36° 37' 30" N 74° 28' 00" W
7:30 PM To 36° 37' 30" N 74° 21' 30" W

Locality: *Charlottesville*
 Depth: *2029 m* Bottom: *fine sand* Sample: *TT 11012*

Wind: Direction, *E* Force, *2*
Air 71 = 21.7 C

Sea: *smooth* Sky: *partly cloudy*

TEMPERATURES

Depth	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
5	<i>SV 9381</i>	<i>19.40</i>					<i>5 L</i>
10	<i>SV 9381</i>	<i>19.40</i>					
15	<i>SV 9381</i>	<i>19.40</i>					
20	<i>SV 9381</i>	<i>19.40</i>					
25	<i>SV 9381</i>	<i>19.40</i>					
30	<i>SV 9381</i>	<i>19.40</i>					
35	<i>SV 9381</i>	<i>19.40</i>					
40	<i>SV 9381</i>	<i>19.40</i>					
45	<i>SV 9381</i>	<i>19.40</i>					
50	<i>SV 9381</i>	<i>19.40</i>					
55	<i>SV 9381</i>	<i>19.40</i>					
60	<i>SV 9381</i>	<i>19.40</i>					
65	<i>SV 9381</i>	<i>19.40</i>					
70	<i>SV 9381</i>	<i>19.40</i>					
75	<i>SV 9381</i>	<i>19.40</i>					
80	<i>SV 9381</i>	<i>19.40</i>					
85	<i>SV 9381</i>	<i>19.40</i>					
90	<i>SV 9381</i>	<i>19.40</i>					
95	<i>SV 9381</i>	<i>19.40</i>					
100	<i>SV 9381</i>	<i>19.40</i>					
105	<i>SV 9381</i>	<i>19.40</i>					
110	<i>SV 9381</i>	<i>19.40</i>					
115	<i>SV 9381</i>	<i>19.40</i>					
120	<i>SV 9381</i>	<i>19.40</i>					
125	<i>SV 9381</i>	<i>19.40</i>					
130	<i>SV 9381</i>	<i>19.40</i>					
135	<i>SV 9381</i>	<i>19.40</i>					
140	<i>SV 9381</i>	<i>19.40</i>					
145	<i>SV 9381</i>	<i>19.40</i>					
150	<i>SV 9381</i>	<i>19.40</i>					
155	<i>SV 9381</i>	<i>19.40</i>					
160	<i>SV 9381</i>	<i>19.40</i>					
165	<i>SV 9381</i>	<i>19.40</i>					
170	<i>SV 9381</i>	<i>19.40</i>					
175	<i>SV 9381</i>	<i>19.40</i>					
180	<i>SV 9381</i>	<i>19.40</i>					
185	<i>SV 9381</i>	<i>19.40</i>					
190	<i>SV 9381</i>	<i>19.40</i>					
195	<i>SV 9381</i>	<i>19.40</i>					
200	<i>SV 9381</i>	<i>19.40</i>					

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction
20	<i>not very much haul</i>					
40	<i>not very much haul</i>					
60	<i>not very much haul</i>					
80	<i>not very much haul</i>					
100	<i>not very much haul</i>					
120	<i>not very much haul</i>					
140	<i>not very much haul</i>					
160	<i>not very much haul</i>					
180	<i>not very much haul</i>					
200	<i>not very much haul</i>					

Color of water: Transparency:

REMARKS: *Bottom for 600, 1000, 1400, 1800 m, down 241 m, 3:00*
Bottom: fine sand, silt, shells

Station No. *C20006* Date: *Nov. 1* 191 *9*

Hour: *10:15 A.M.* to *11:10 A.M.*

Position: Lat. *25° 04' 00" N* Long. *75° 18' 00" W*

Locality: *Chart 1155 1001*

Depth: *36 m.* Bottom: *S, sh* Sample: *TT 11253*

Wind: Direction, *WSW* Force, *2* / Air *78-25.56*

Sea: *choppy* Sky: *clear with clouds*

TEMPERATURES

Depth	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
<i>0</i>	<i>Tyrol</i>	<i>76.0</i>					<i>GB</i>
<i>15</i>	<i>11157</i>	<i>24.29</i>	<i>25.0</i>	<i>-.04</i>	<i>24.25</i>		
<i>15</i>	<i>11154</i>	<i>24.29</i>	<i>25.0</i>	<i>-.04</i>	<i>24.25</i>		
<i>30</i>	<i>11152</i>	<i>24.75</i>	<i>25.0</i>	<i>-.03</i>	<i>24.72</i>		
	<i>11161</i>						

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS: *Et. l. dr. water level*

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Bottom net (25 m) 40m	25-6	10:40	11:10	3.0
1/2 m. net	surf	10:40	11:05	
#20 net	surf	10:40	11:05	

11-5314

NOTES

Station No. 62007

Date: May 1

1917

Hour: 1:00 P. M. to 3:00 P. M.

Position: Lat. 35° 01' 00" N Long. 75° 14' 00" W

Locality: Cape Cod Bay
Chart 1000

Depth: 223m Bottom: S, sh, gy Sample: 710

Wind: Direction, WSW Force, 2 Air 81-27

Sea: choppy Sky: partly cloudy

TEMPERATURES

Depth	Thermometer Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
Surf	Tycos 1	82.0			27.8	✓	61
5	1154	27.5	27.5	.5		✓	
10	1157	26.9	28.0	.5		✓	
15	1154	24.92	27.0	.7		✓	
20	1154	16.39	26.0			✓	

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction
*	1:00	low	27.55	27.60		

Color of water: Pale

Transparency:

REMARKS: Bottom mud, light green, 12/27 (L. 11m)

Bottom mud, light green, 12/27 (L. 11m)
 mud, light green, 12/27 (L. 11m)
 mud, light green, 12/27 (L. 11m)

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down PM	Up PM	
Vertical 1 meter	200	1:43	2:00	10 knots
Bottom net, 2 ft. on 220m)	190-0	2:35	3:00	24 Rev
#2	200	2:35	3:00	do
12 meter	do			

11-5314

NOTES

50

Station No. 1400 Date: July 1 1914

Hour: 7:35 P.M. to 10:50 P.M. Drift N 45 E 6.2 mi

Position: Lat. from 34° 54' 30" N Long. 75° 17' 00" W
 To 34° 59' 00" N 75° 02' 00" W

Locality: Cape Hatteras 15 miles off shore
 Chart C. 1 G. S. 1001

Depth: 10 fms Bottom: Sample: -

Wind: Direction, SW Force, fresh / Air 77 F

Sea: choppy Sky: Cloudy

TEMPERATURES

Depth	Thermometer Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
Surf	11153	26.7					613
0	11151	26				✓	
50	11153	25.44	25.0	+ .1			
100	11154	25.52	25.5	-.4			
150	11152	26.37	25.0				
200	11154	18.26	25			✓	
400	11151	16.67	25.0			✓	
600	11153	16.42	25.0			✓	
800	11152	16.05	26.0			✓	
1000	11157	9.18	25.0	-.3	8.88	✓	
	11157	9.05	26.0				

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction
200	11:15	23.90	25.0			
400	11:15	23.40	25.0			

Color of water: Transparency:

REMARKS: 249 net towed at 10:50 to 11:00
 116 fms net towed at 11:00 to 11:15
 11-5314

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

| Description | Depth
meters | TIME | | Speed |
|----------------------|-----------------|--------------|------------|-------|
| | | Down
P.M. | Up
P.M. | |
| Vertical (1 meter) | | | | |
| Bottom - red mud | | | | |
| 1 meter - red mud | | | | |
| 2 meters - red mud | | | | |
| 3 meters - red mud | | | | |
| 4 meters - red mud | | | | |
| 5 meters - red mud | | | | |
| 6 meters - red mud | | | | |
| 7 meters - red mud | | | | |
| 8 meters - red mud | | | | |
| 9 meters - red mud | | | | |
| 10 meters - red mud | | | | |
| 11 meters - red mud | | | | |
| 12 meters - red mud | | | | |
| 13 meters - red mud | | | | |
| 14 meters - red mud | | | | |
| 15 meters - red mud | | | | |
| 16 meters - red mud | | | | |
| 17 meters - red mud | | | | |
| 18 meters - red mud | | | | |
| 19 meters - red mud | | | | |
| 20 meters - red mud | | | | |
| 21 meters - red mud | | | | |
| 22 meters - red mud | | | | |
| 23 meters - red mud | | | | |
| 24 meters - red mud | | | | |
| 25 meters - red mud | | | | |
| 26 meters - red mud | | | | |
| 27 meters - red mud | | | | |
| 28 meters - red mud | | | | |
| 29 meters - red mud | | | | |
| 30 meters - red mud | | | | |
| 31 meters - red mud | | | | |
| 32 meters - red mud | | | | |
| 33 meters - red mud | | | | |
| 34 meters - red mud | | | | |
| 35 meters - red mud | | | | |
| 36 meters - red mud | | | | |
| 37 meters - red mud | | | | |
| 38 meters - red mud | | | | |
| 39 meters - red mud | | | | |
| 40 meters - red mud | | | | |
| 41 meters - red mud | | | | |
| 42 meters - red mud | | | | |
| 43 meters - red mud | | | | |
| 44 meters - red mud | | | | |
| 45 meters - red mud | | | | |
| 46 meters - red mud | | | | |
| 47 meters - red mud | | | | |
| 48 meters - red mud | | | | |
| 49 meters - red mud | | | | |
| 50 meters - red mud | | | | |
| 51 meters - red mud | | | | |
| 52 meters - red mud | | | | |
| 53 meters - red mud | | | | |
| 54 meters - red mud | | | | |
| 55 meters - red mud | | | | |
| 56 meters - red mud | | | | |
| 57 meters - red mud | | | | |
| 58 meters - red mud | | | | |
| 59 meters - red mud | | | | |
| 60 meters - red mud | | | | |
| 61 meters - red mud | | | | |
| 62 meters - red mud | | | | |
| 63 meters - red mud | | | | |
| 64 meters - red mud | | | | |
| 65 meters - red mud | | | | |
| 66 meters - red mud | | | | |
| 67 meters - red mud | | | | |
| 68 meters - red mud | | | | |
| 69 meters - red mud | | | | |
| 70 meters - red mud | | | | |
| 71 meters - red mud | | | | |
| 72 meters - red mud | | | | |
| 73 meters - red mud | | | | |
| 74 meters - red mud | | | | |
| 75 meters - red mud | | | | |
| 76 meters - red mud | | | | |
| 77 meters - red mud | | | | |
| 78 meters - red mud | | | | |
| 79 meters - red mud | | | | |
| 80 meters - red mud | | | | |
| 81 meters - red mud | | | | |
| 82 meters - red mud | | | | |
| 83 meters - red mud | | | | |
| 84 meters - red mud | | | | |
| 85 meters - red mud | | | | |
| 86 meters - red mud | | | | |
| 87 meters - red mud | | | | |
| 88 meters - red mud | | | | |
| 89 meters - red mud | | | | |
| 90 meters - red mud | | | | |
| 91 meters - red mud | | | | |
| 92 meters - red mud | | | | |
| 93 meters - red mud | | | | |
| 94 meters - red mud | | | | |
| 95 meters - red mud | | | | |
| 96 meters - red mud | | | | |
| 97 meters - red mud | | | | |
| 98 meters - red mud | | | | |
| 99 meters - red mud | | | | |
| 100 meters - red mud | | | | |

11—511 d

NOTES

[illegible]

Measurements: length 400 mm, fin
span 120 mm, 2 mm, 15 mm

1917

Hour: 2:57 P. M. to 5:40 . M.

Position: Lat. $29^{\circ} 55' 30''$ N Long. $81^{\circ} 10'$

Locality: off pt Augustin
Chart 0182 (100)

Depth: 9.54 Bottom: Sample:

Wind: Direction, NE

Force, *stiff*
AIR 72-2...

Score:

Sky:

TEMPERATURES

| Depth | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|------------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| 5 | B.S. # | 52.530 | | | | | 612 |
| | Tyros 1 | 77.5 | | | | | |
| 14 | SV 9383 | | | | | | |
| | R11499 | | | | | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |

Color of water:

Transparency:

REMARKS: *11. 1. 1961*

Station No. 20010 Date: Nov. 10 1917

Hour: 1:38 P.M. to 1:55 P.M.

Position: Lat. 27° 34' 00" N Long. 80° 10' 00" W

Locality:

Depth: 1 1/2 fms Bottom: S, sh Sample: none

Wind: Direction, ESE Force, slight breeze Air 78 = 25.56 C

Sea: choppy Sky: partly cloudy

TEMPERATURES

| Depth | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|------------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| | B.S. # | | | | | | |
| 1 | 7543 | | | | 24.81 | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |

Color of water: Green Transparency:

REMARKS: Heaving line, snapper-lead. Green water.

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|-------------|-------|------|----|-------|
| | | Down | Up | |
| | | | | |

11-5311

NOTES

Station No. (11

Date:

191

Hour: 3:30 P. M. to 4:20 P. M.

Drift N 21 W 4 mi

Position: Lat. From 27° 34' 00" N Long. 79° 55' 30" W
To 27° 37' 00" N 79° 56' 30" WLocality: 11 mi E from 20010
Chart C + G S 1007

Depth: 85 m Bottom: S. sh Sample: none

Wind: Direction, ESE Force, 11
Air 79

Sea: choppy Sky: cloudy

TEMPERATURES

| Depth | Thermometer
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|-----------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| | B.S. # | | | | | | |
| | Tyco 1 | | | | 26.1 | | |
| | R 11497 | 26.20 | 24.0 | -0.08 | 26.17 | | |
| | R 11499 | 26.15 | 24.0 | +0.02 | 26.17 | | |
| | | | | +0.01 | 25.91 | | |
| 74 | NZ20876 | | | +0.02 | 25.67 | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water: Blue

Transparency:

REMARKS: Slight drizzle, overcast. 11-5314

Wave (choppy) - angle 15°
Blue water

Station No. *C-17*Date: *Dec 11 1917*

191

Hour: *7:00 P.* M. to *9:00 P.* M.Drift *11 mi. W. 1 mi. S.*Position: Lat. *37° 34' 00" N* Long. *79° 34' 00" W**37° 41' 30" N 79° 30' 00" W*

Locality:

Chart 1100

Depth:

Bottom:

Sample:

Wind: Direction, *E*Force, *surf, breeze**Air 79 = 26.11*Sea: *choppy*Sky: *partly cloudy*

TEMPERATURES

| Depth | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------------|------------------------------|--------------|---------------|-----------------|--------------------|-----------|----------------|
| <i>Surf</i> | <i>B.S. #</i> | <i>22.75</i> | | | | | <i>GB</i> |
| <i>0</i> | <i>Tyrol</i> | <i>22.75</i> | | | <i>22.75</i> | | |
| <i>50</i> | <i>NZ 208760</i> | <i>22.75</i> | | | <i>22.75</i> | | |
| <i>100</i> | <i>NZ 208720</i> | <i>24.33</i> | <i>23.5</i> | <i>-.01</i> | <i>24.32</i> | | |
| <i>150</i> | <i>SV 7383</i> | <i>24.60</i> | | <i>-.07</i> | <i>24.53</i> | | |
| <i>200</i> | <i>SV 9382</i> | <i>24.75</i> | | <i>-.07</i> | <i>24.68</i> | | |
| <i>250</i> | <i>SV 9383</i> | <i>24.75</i> | | <i>-.07</i> | <i>24.68</i> | | |
| <i>300</i> | <i>R 11479</i> | <i>24.75</i> | | <i>-.07</i> | <i>24.68</i> | | |
| <i>350</i> | <i>NZ 208720</i> | <i>24.75</i> | | <i>-.07</i> | <i>24.68</i> | | |
| <i>400</i> | <i>NZ 20876</i> | <i>24.75</i> | | <i>-.07</i> | <i>24.68</i> | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | <i>.417</i> | | |
| | | | | <i>.20</i> | | |

Color of water:

Transparency:

REMARKS:

11-5311

Station No.

Date:

191

Hour: 12:23 A. M. to 1:55 A. M.

Drift N N'W 4 mi.

Position: Lat. $27^{\circ} 30' 00''$ N Long. $79^{\circ} 10' 00''$ WTo $27^{\circ} 37' 30''$ N $79^{\circ} 11' 00''$ W

Locality: Little Bahama Bank

Depth:

Bottom:

S, sh

Sample: no

Wind: Direction,

Force,

Air $77 = 25.0^{\circ}$ C

Sea:

Sky:

TEMPERATURES

| Depth | Thermometer
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|-----------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| | B. S. #
Sept 1 | 22.75 | | | 22.75 | | S/S |
| 60 | R 11498 | 22.30 | 23.5 | +0.6 | 22.36 | | #4 |
| | NZ 20872 | 0 | | | 22.37 | | |
| | | | | | 22.37 | | |
| | | | | | 22.37 | | |
| 200 | R 11497 | 22.34 | 24.0 | -1.0 | 22.24 | | |
| | SV 1388 | | | | 17.17 | | |
| | | | 26.0 | -1.6 | 17.78 | | |
| | | | | | 17.11 | | |
| | | | | | 21.16.19 | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water:

Transparency:

REMARKS:

Big and hollow
inside and outside: 21.16

11-5314

Station No. 2111

Date: 1907

191

Hour: 7:10 A.M. to 7:40 P.M.

Position: Lat. 25° 34' 30" N Long. 80° 04' 00" W

Locality: Fallen Rock
East of 165 1007Depth: 20 fms
100 m Bottom: S sh Sample: no

Wind: Direction, Force, Air 76

Sea: smooth Sky: partly cloudy

TEMPERATURES

| Depth | Thermometer
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|-----------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| | | 26.9 | | | 26.9 | | 215 |
| | Tyrol | | | | | | |
| 30 | SV 9388 | 0 | | | | ✓ | 6 |
| | R 11497 | x26.38 | 24.0 | -.03 | 26.35 | | |
| | 11500 | x26.44 | 25.0 | -.01 | 26.43 | | |
| 70 | HZ 20876 | 0 | | | | | |
| | R 11498 | x24.60 | 24.0 | -.01 | 24.59 | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water:

Transparency:

REMARKS: Elect. obs. Ruppel's lead

11-5314

NETS, ETC., USED

[illegible]

11-5514

NOTES

Station No. 020015 Date: Nov 11 1917

Hour: . M. to 7 . M. Drift N 2 m

Position: Lat. 25° 36' 00" N Long. 79° 57' 30" W

Locality:

Depth: 177 fms Bottom: S M Sample: T T

Wind: Direction, Force, Air 3-20

Sea: smooth Sky: partly cloudy

TEMPERATURES

| Depth | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|------------|------------------------------|--------------|---------------|-----------------|--------------------|-----------|----------------|
| | B.S. # | | | | | | B # |
| | <u>SV 9383</u> | <u>21.7</u> | | | <u>21.7</u> | | |
| <u>50</u> | <u>SV 9383</u> | <u>21.3</u> | | <u>-2</u> | <u>21.32</u> | <u>✓</u> | <u>3</u> |
| | <u>R 11497</u> | <u>22.63</u> | <u>25.0</u> | <u>-12</u> | <u>22.51</u> | <u>✓</u> | <u>6</u> |
| <u>150</u> | <u>SV 9383</u> | <u>16.54</u> | <u>24.0</u> | <u>-21</u> | <u>16.33</u> | <u>✓</u> | <u>6</u> |
| | <u>R 11497</u> | <u>10.45</u> | <u>25.0</u> | <u>-28</u> | <u>10.17</u> | | |
| | <u>72</u> | <u>9.54</u> | <u>25.0</u> | <u>-11</u> | <u>9.13</u> | <u>✓</u> | <u>4</u> |
| | <u>R 11500</u> | <u>9.29</u> | <u>25.0</u> | <u>-32</u> | <u>8.97</u> | | |
| <u>200</u> | <u>N 220876</u> | <u>8.44</u> | <u>25.0</u> | <u>-36</u> | <u>8.08</u> | <u>✓</u> | <u>3</u> |
| | <u>R 11498</u> | <u>8.41</u> | <u>25.0</u> | <u>-33</u> | <u>8.08</u> | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water: Transparency:

REMARKS: Lucas sdr. P. 1000 11-5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|-------------|-------|------|----|-------|
| | | Down | Up | |
| <p>1/2</p> | 246 | | PM | |
| | | | | |
| | | | | |
| | | | | |

11-5814

NOTES

Station No. *C 20016* Date: *Nov. 12* 191*9*

Hour: *12:12 A. M.* to *2:51 A. M.*

Drift *N 6.5 mi*

Position: Lat. *25° 40' 30" N* Long. *79° 45' 30" W*

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force, *Air 74-22.3*

Sea: *smooth* Sky: *cloudy*

TEMPERATURES

| Depth | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|------------|------------------------------|--------------|---------------|-----------------|--------------------|-----------|----------------|
| | | <i>27.74</i> | | | | | |
| <i>0</i> | <i>Tyus 2</i> | <i>82.0</i> | | | <i>27.75</i> | <i>✓</i> | |
| <i>50</i> | <i>NZ 20876</i> | <i>0</i> | | | | <i>✓</i> | <i>5</i> |
| | | | | | <i>27.2</i> | | |
| <i>100</i> | <i>NZ 20872</i> | <i>0</i> | | | | <i>✓</i> | <i>4</i> |
| | | | | | <i>27.7</i> | | |
| <i>150</i> | <i>SV 9383</i> | <i>0</i> | | | | <i>✓</i> | <i>3</i> |
| | | | | | <i>27.6</i> | | |
| <i>200</i> | <i>SV 9388</i> | <i>0</i> | | | | <i>✓</i> | <i>6</i> |
| | | | | | <i>27.3</i> | | |
| <i>300</i> | <i>SV 9388</i> | <i>0</i> | | | | <i>✓</i> | <i>6</i> |
| | <i>R 11197</i> | <i>14.91</i> | <i>25.0</i> | <i>-26</i> | <i>14.65</i> | | |
| <i>400</i> | <i>SV 9383</i> | <i>11.95</i> | <i>26.0</i> | <i>-35</i> | <i>11.60</i> | <i>✓</i> | <i>3</i> |
| | | | | | <i>11</i> | | |
| <i>600</i> | <i>NZ 20872</i> | <i>7.42</i> | <i>25.0</i> | <i>-42</i> | | | |
| | | | | | <i>27.8</i> | | |
| <i>800</i> | <i>NZ 20876</i> | <i>6.30</i> | <i>24.5</i> | <i>-40</i> | <i>5.90</i> | <i>✓</i> | <i>5</i> |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water: Transparency:

REMARKS: *Deep red. Disturbed*

NETS, ETC., USED

| Description | Depth
Fathoms | TIME | | Speed |
|----------------|------------------|------|------|-------|
| | | Down | Up | |
| 2. 1. 1. 1. 1. | | | | |
| 2. 1. 1. 1. 1. | 700 | 5.10 | 2.10 | |
| 1. 1. 1. 1. 1. | 200 | 1.10 | 1.10 | |
| 2. 1. 1. 1. 1. | | 1.10 | 1.10 | |

11-5314

NOTES

Station No. 20017

Date: Nov. 12

191

Hour: . M. to . M.

Drift N 3.3 m

Position: Lat. From 25° 33' 30" N Long. 79° 27' 30" W
To 25° 33' 30" N 79° 27' 30" W

Locality:

Depth: 877 m Bottom: Co. S. sh Sample: 11257

Wind: Direction, N Force, 2 Air $77 = 25.0$

Sea: Sky:

TEMPERATURES

| Depth | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|------------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| Surf | B.S. # | 25.1 | | | | | 613 # |
| 5 | Tycos | 28.2 | | | 28.1 | | |
| 10 | NZ 20876 | 27.5 | | | | | |
| | R 11498 | X 27.6 | | | 27.24 | | |
| 100 | NZ 20872 | | | | | | |
| | R 11500 | | | | 27.00 | | |
| 150 | SV 9383 | | | | | | |
| | | | | | 23.25 | | |
| 195 | NZ 165868 | | | | | | |
| | R 11497 | | | | 20.32 | | |
| 300 | NZ 165868 | 017.63 | | | 17.26 | | |
| | R 11497 | | | | 17.30 | | |
| | 9383 | | | | | | |
| 600 | NZ 20872 | | | | 9.27 | | |
| | R 11500 | | | | 9.27 | | |
| 800 | NZ 20876 | | | | 6.74 | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |

Color of water: Blue

Transparency:

REMARKS:

11—5314

Station No. 018 Date: Nov. 15 1917

Hour: 6:18 P. M. to 7:15 . M.

Position: Lat. 24° 21' N Long. 81° 10' W

Locality: Sand Key
59 fms Chart 165 1001

Depth: 117 m Bottom: S, sh Sample: 11259

Wind: Direction, N1 Force, 1 Air 4-28

Sea: smooth Sky: partly cloudy

TEMPERATURES

| Depth | Thermometer -
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle-
used |
|-------|-------------------------------|---------|---------------|-----------------|--------------------|-----------|-----------------|
| 1.00 | B.S. # | 26.9 | | | | | 64.4 |
| | Thymer | | | | 26.9 | ✓ | |
| 30 | NZ 165818 | 0 | | | 26.9 | ✓ | #6 |
| | R 11499 | 25.97 | 26.0 | -0.2 | 25.95 | | |
| 90 | NZ 20872 | 0 | | | 25.95 | ✓ | #11 |
| 100 | NZ 20872 | 0 | | | | ✓ | #4 |
| | R 11500 | 19.39 | 24.5 | -1.3 | 19.26 | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water: Transparency:

REMARKS: 6 lead, 2 snapper lead 11-5314

Station No. C 20019 Date: 1914 11-16 1919

Hour: 9:42 P. M. to 12: A. M.

Position: Lat. *From 24° 13' 30"* Long. *82° 00' 00"*
70 24° 07' 30" N 81° 58' 10" W

Locality:

Depth: 156 m Bottom: gy M Sample: 11260

Wind: Direction, NE Force, 1-2

Sea: *light choppy* Sky: *clear*

TEMPERATURES

| Depth | Thermometer
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|-----------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| | B 500
Type 20 | 26.7 | | | 26.7 | | CB |
| | | | | | 25.8 | | |
| | | | | | 25.4 | | |
| | | | | | 11.5 | | |
| | | | | | 11.5 | | |
| | | | | | 13.0 | | |
| | | | | | 11.5 | | |
| | | | | | 11.5 | | |
| | | | | | 11.5 | | |
| | | | | | 24 | | |
| | | | | | 39 | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|---------|--------|-----------|-------------|-------|-----------|
| | | | | - 35 | 7.57 | |
| | R 11498 | X 7.89 | 25.0 | - 21 | 7.55 | |

Color of water: .

Transparency:

REMARKS:

11—5114

191 *g*

Drift S46 E 215

Locality:

Sea: smooth Sky: clear, mostly cloudy

11—5314

Station No.

Date: 11/29

1919

Hour: 7:08 A. M. to 10:27 A. M.

Drift S 19 1/2 E 5 mi

Position: Lat. From 23° 42' 30" N Long. 82° 09' 30" W
To 23° 38' 00" N 82° 08' 10" W

Locality:

Chart C & G S 1007

Depth: 165 m Bottom: gy. M. det oz Sample: 11262

Wind: Direction, N.E

Force, 2

N.E. 7-10 mph

Sea: choppy

Sky: Partly

TEMPERATURES

| Depth | Thermometer
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|-----------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| | B.S. # | 28.1 | | | | | CR# |
| | Tyler 2 | | | | 28.1 | | |
| | | | | | 27.53 | | |
| | | | | 1.01 | 26.54 | | |
| | | | | | 18.83 | | |
| 300 | NZ 20872 | | | | | | |
| | R 11500 | | | 3 | 15.11 | | |
| 400 | SV 9383 | | | -3 | 11.13 | | |
| | R 11499 | 3.3 | | 8 | 11.17 | | |
| | NZ 165865 | | | -3.1 | 8.19 | | |
| | R 11497 | | | | 8.17 | | |
| 800 | NZ 16586 | | | -3.1 | 6.4 | | |
| | | | | | 6.30 | | |
| | | | | -4.3 | 5.11 | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|----------|------|-----------|-------------|-------|-----------|
| | | | | -45 | 5.28 | |
| | | 5.73 | 26.0 | -40 | 5.33 | |
| 1600 | NZ 20876 | 4.71 | 25.5 | -45 | 4.88 | |
| | R 11498 | 4.68 | 24.5 | -39 | 4.27 | |

Color of water:

Transparency:

REMARKS:

11-5314

10 light

Station No. 20022 Date: Nov 16 1917

Hour: . M. to . M.

Drift S 37 1/2 E 2.5 mi.

Position: Lat. 11° 30' 00" N Long. 82° 15' 00" W

Locality:

Depth: 920 fms Bottom: coral Pter Sample: 1121

Wind: Direction, NE Force, 2 Air 81 = 27.0

Sea: slightly choppy Sky: partly cloudy

TEMPERATURES

| Depth | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|------------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| | B.S. # | 28.6 | | | | | 6.5 |
| | Therm | | | | 28.6 | | |
| | | | | | 27.82 | | |
| | | | | | 26.78 | | |
| 205 | NZ 205 | | | | 26.18 | | |
| | | 16.27 | 26.5 | | 16.14 | | |
| | | 27.0 | 26.5 | -.0 | 12.52 | | |
| | | 26.8 | 26.5 | | 12.47 | | |
| | | 26.9 | 26.5 | -.33 | 8.41 | | |
| | | 27.0 | 26.5 | | 8.34 | | |
| | | | | -.32 | 6.1131 | | |
| | | | | | 6.27 | | |
| | | | | -.11 | 1.04 | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|----------|------|-----------|-------------|-------|-----------|
| 300 | 11220872 | | | -.46 | 4.82 | |
| | | | | .41 | 4.80 | |
| | | | | .46 | 4.81 | |
| | | | | | 4.77 | |

Color of water: Transparency:

REMARKS:

Station No. *C 20023* Date: *July 21* 191*9*

Hour: *12* M. to *1* M.

Drift *5.33 W 12 mi*

Position: Lat. *23° 13' 30" N* Long. *82° 27' 00" W*

Locality: *Off Harau, Cuba*

Depth: *12 fms* Bottom: *gy M* Sample: *11264*

Wind: Direction, *NNE* Force, *2*

Sea: *choppy* Sky: *partly cloudy*

TEMPERATURES

| Depth | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|------------|------------------------------|----------------|---------------|-----------------|--------------------|-----------|----------------|
| | <i>B.S.</i> | <i>27.15</i> | | | | | <i>624</i> |
| | <i>Typical</i> | <i>27.15</i> | | | <i>27.13</i> | | |
| <i>100</i> | <i>NZ 20872</i> | <i>0</i> | | | | <i>✓</i> | |
| | <i>R 11500</i> | <i>x 26.75</i> | <i>27.0</i> | <i>-.05</i> | <i>26.70</i> | | |
| | <i>SV 9383</i> | <i>0</i> | | | | | |
| | <i>R 11499</i> | <i>x 23.66</i> | <i>26.0</i> | <i>-.07</i> | <i>23.59</i> | | |
| <i>8</i> | <i>SV 9383</i> | <i>17.73</i> | <i>26.0</i> | <i>-.27</i> | <i>17.46</i> | | |
| | | | | <i>-.21</i> | <i>17.25</i> | | |
| <i>400</i> | <i>NZ 165868</i> | <i>0 17.17</i> | <i>26.0</i> | <i>-.29</i> | <i>16.88</i> | | |
| | <i>R 11497</i> | <i>x 17.34</i> | <i>26.0</i> | <i>-.24</i> | <i>17.10</i> | | |
| <i>600</i> | <i>SV 9383</i> | <i>0 12.03</i> | <i>26.0</i> | <i>-.35</i> | <i>11.68</i> | | |
| | | <i>12.04</i> | | <i>-.21</i> | <i>11.83</i> | | |
| <i>900</i> | <i>NZ 20872</i> | <i>0 7.20</i> | <i>27.0</i> | <i>-.45</i> | <i>6.75</i> | | |
| | | | | <i>-.40</i> | <i>6.80</i> | | |
| | <i>Z 20876</i> | | | <i>-.40</i> | <i>6.80</i> | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water: *Blue* Transparency:

REMARKS:

11.40 - 4.50 1st series

Station No. *C 20074* Date: *Nov. 22* 191*7*

Hour: *1:06 P.* M. to *6:10 P.* M.

Position: Lat. *From 21° 50' 00" N* *Drift 2.5 mi 215 mi*
To 21° 00' 00" N Long. *157° 15' 00" W*

Locality: *C. from Antonio, Cuba 5 miles from channel*
Chart C-65 1007

Depth: *100 fms* Bottom: *COS* Sample:

Wind: Direction, *NNE* Force, *1 1/2*
Air 79 = 26.11

Sea: *light choppy* Sky: *clear hazy*

TEMPERATURES

| Depth | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|------------|------------------------------|----------------|---------------|-----------------|--------------------|-----------|----------------|
| | <i>B.S. #</i> | <i>27.5</i> | | | | | <i>GB</i> |
| | <i>Tyler 2</i> | | | | <i>27.5</i> | | |
| <i>50</i> | <i>NZ 20872</i> | <i>0</i> | | | | | |
| | <i>R 11500</i> | <i>x 27.32</i> | <i>27.0</i> | <i>-0.4</i> | <i>27.28</i> | | |
| <i>100</i> | <i>NZ 20876</i> | <i>0</i> | | | | | |
| | <i>R 11498</i> | <i>27.0</i> | | <i>-0.2</i> | <i>27.28</i> | | |
| <i>200</i> | <i>NZ 20876</i> | | | | | | |
| | | | | <i>-0.2</i> | <i>27.28</i> | | |
| <i>300</i> | <i>NZ 20872</i> | <i>0</i> | | | | | |
| | <i>R 11500</i> | <i>17.90</i> | <i>2</i> | <i>-0.20</i> | <i>17.70</i> | | |
| | <i>SV 4383</i> | <i>15.88</i> | <i>2</i> | | | | |
| | | <i>.80</i> | | <i>-0.1</i> | <i>15.58</i> | | |
| | | <i>.25</i> | | <i>-0.3</i> | <i>15.43</i> | | |
| | | <i>.2</i> | | <i>-0.1</i> | <i>15.43</i> | | |
| | | | | <i>-0.2</i> | <i>15.81</i> | | |
| | | | | <i>-0.2</i> | <i>15.74</i> | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------------|-----------------|---------------|-------------|--------------|-------------|------------|
| | | | | <i>- 51</i> | <i>1.17</i> | <i>✓ 4</i> |
| | <i>R 11500</i> | <i>x 4.65</i> | <i>26.0</i> | <i>- 113</i> | <i>1.21</i> | |
| <i>1600</i> | <i>NZ 20876</i> | <i>x 4.55</i> | <i>26.0</i> | <i>- 116</i> | <i>1.24</i> | |
| | <i>R 11498</i> | <i>x 4.52</i> | <i>25.0</i> | <i>- 110</i> | <i>1.12</i> | |

Color of water: *Blue* Transparency:

REMARKS:

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|-------------|-------|------|----|-------|
| | | Down | Up | |
| | | 41 | | |

11-5314

NOTES

Station No. 211

Date:

191

Hour: 9:45 PM ^{110V22} M. to 1:55 A M. Nov 23

Position: Lat. From 21° 41' 30" To 21° 41' 30" N Long. 85° 39' 00" 85° 44' 00" W

Locality: 41. Chart 565 1007

Depth: Bottom: Sample:

Wind: Direction, E Force, 2-3

Air 79 = 26.11

Sea: Very smooth Sky: Cloudy, light showers

TEMPERATURES

| Depth | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|------------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| | B.S. | 28.1 | | | | | |
| 0 | Tijon 2 | 22.5 | | | 28.1 | | |
| 100 | R 11500 | x 27.45 | 27.0 | -.03 | 27.42 | | |
| 100 | NZ 20876 | 0 | | | | ✓ | 5 |
| 200 | NZ 20876 | 0 | | | | ✓ | 5 |
| 200 | R 11498 | x 20.71 | 26.0 | -.13 | 20.58 | | |
| 300 | NZ 20872 | 0 | | | | ✓ | 5 |
| 400 | SV 9383 | 0 | | | | ✓ | |
| 600 | NZ 46868 | 0 10.57 | 25.0 | -.32 | 10.25 | ✓ | 5 |
| | R 11497 | x 10.52 | 25.0 | -.34 | 10.18 | | |
| | | | | -.32 | 7.23 | | |
| | R 11497 | x 7.51 | 25.0 | -.39 | 7.12 | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|----------|---------|-----------|-------------|-------|-----------|
| 1300 | NZ 20872 | 0 11.81 | 26.0 | -151 | 4.30 | |
| | R 11500 | x 4.76 | 26.0 | -142 | 4.34 | |
| 1600 | NZ 20876 | 0 4.59 | 25.0 | -145 | 4.14 | |
| | R 11498 | x 4.56 | 25.0 | -140 | 4.16 | |

Color of water:

Transparency:

REMARKS: Surges obs, 0.5 ft. fine

11-5314

On beginning of surge to

and surges came and away

No. 100

Station No. *C 20026* Date: *June 1, 1911*

Hour: *5:32 A.M.* to *10:20 P.M.* Drift *N 7 1/2 W 10.5 mi*

Position: Lat. *From 21° 31' 00"* Long. *86° 08' 30"*
to 21° 41' 00" 86° 10' 00"

Locality: *Yucatan Channel*
Chart C & GS 1007

Depth: *1745 meters* Bottom: Sample:

Wind: Direction, *N* Force, *2*
Air 76 = 24.44 C

Sea: *beam swell* Sky: *partly clear*

TEMPERATURES

| Depth | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------------|------------------------------|----------------|---------------|-----------------|--------------------|-----------|----------------|
| | <i>B.S. #</i> | <i>28.1</i> | | | | | <i>GB #</i> |
| | <i>Leys</i> | | | | <i>28.1</i> | | |
| | <i>R11498</i> | <i>x 27.35</i> | <i>27.0</i> | <i>-02</i> | <i>27.33</i> | | |
| <i>100</i> | <i>SY9383</i> | | | <i>-11</i> | <i>25.7</i> | | <i>2</i> |
| | | | | <i>-26</i> | <i>18.79</i> | | |
| | <i>R11497</i> | <i>19.05</i> | <i>25.5</i> | <i>-20</i> | <i>18.80</i> | | |
| | <i>Z16586.8</i> | <i>0 17.59</i> | <i>25.0</i> | <i>-27</i> | <i>17.32</i> | | <i>6</i> |
| | <i>R11497</i> | <i>x 17.50</i> | <i>25.0</i> | <i>-21</i> | <i>17.29</i> | | |
| | | | | | | | |
| | <i>R11497</i> | <i>x 15.27</i> | <i>25.0</i> | <i>-22</i> | <i>15.07</i> | | |
| <i>00</i> | <i>N20876</i> | | | | | | |
| | <i>R11498</i> | <i>x 11.81</i> | <i>25.0</i> | <i>-28</i> | <i>11.53</i> | | |
| | | | | <i>-31</i> | <i>7.29</i> | | |
| | <i>R11497</i> | <i>x 7.48</i> | <i>26.0</i> | <i>-41</i> | <i>7.07</i> | | |
| <i>1000</i> | <i>N20872</i> | <i>0 6.54</i> | <i>25</i> | <i>-12</i> | <i>6.11</i> | | |
| | | | | <i>-37</i> | <i>...</i> | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|---------------|---------------|-------------|-------------|-------------|-----------|
| | | | | <i>-52</i> | <i>4.42</i> | |
| | <i>R11500</i> | <i>x 4.42</i> | <i>26.0</i> | <i>-42</i> | <i>4.50</i> | |
| | | | | <i>-116</i> | <i>4.24</i> | |
| | <i>R11498</i> | <i>x 4.63</i> | <i>25.0</i> | <i>-40</i> | <i>4.23</i> | |

Color of water: *BW* Transparency:

REMARKS: *50 fms. surface water, surface current*
strong, set to the right

20 min. (10 min.) angle 20°

Station No. 50087 Date: Aug 13 191

Hour: 4:30 P . M. to: . M.

Position: Lat. From 21° 35' 30" Drift N 1/2 W 7/8 mi.
To 21° 42' 30" Long. 86° 35' 00"
86° 37' 00"

Locality:

Depth: Chart 1165 Bottom: st Sample: at

Wind: Direction, NNE Force, 1

Sea: smooth Sky: partly cloudy

TEMPERATURES

| Depth | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-----------|------------------------------|----------------|---------------|-----------------|--------------------|-----------|----------------|
| | <u>35</u> | <u>27.75</u> | | | <u>27.75</u> | | |
| <u>15</u> | <u>NZ 20876</u> | <u>0</u> | | | | | |
| | <u>R 11498</u> | <u>x 27.12</u> | <u>27.0</u> | <u>-0.2</u> | <u>27.10</u> | | |
| <u>30</u> | <u>NZ 115868</u> | <u>0</u> | | | | | |
| | <u>R 11497</u> | <u>x 27.00</u> | <u>27.0</u> | <u>-0.8</u> | <u>26.92</u> | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |

Color of water: blue Transparency:

REMARKS:

Station No. *C 20028* Date: *Nov. 21* 191*7*

Hour: *3:07 P.* M. to *8:05 P.* M. Drift *SE 7.5 mi*

Position: Lat. Long.

Locality:

Depth: Bottom: *40* Sample:

Wind: Direction, *E* Force, *1* Air *81 = 27.0*

Sea: Sky:

TEMPERATURES

| Depth | Thermometer--
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------------|-------------------------------|----------------|---------------|-----------------|--------------------|-----------|----------------|
| | <i>B.</i> | <i>28.1</i> | | | | | <i>18#</i> |
| <i>50</i> | <i>NZ 20876</i> | <i>0</i> | | | <i>28.1</i> | <i>✓</i> | <i>5</i> |
| | <i>R 11498</i> | <i>x 27.20</i> | <i>27.0</i> | <i>-.03</i> | <i>27.17</i> | | |
| <i>100</i> | <i>NZ 20872</i> | <i>0</i> | | | | <i>✓</i> | <i>4</i> |
| | <i>R 11500</i> | <i>x 27.22</i> | <i>27.0</i> | <i>-.04</i> | <i>27.18</i> | | |
| <i>200</i> | <i>NZ 20876</i> | <i>0</i> | | | | <i>✓</i> | |
| | <i>R 11498</i> | <i>x 22.18</i> | <i>26.0</i> | <i>-.10</i> | <i>22.08</i> | | |
| <i>400</i> | <i>R 11500</i> | <i>x 17.81</i> | <i>26.0</i> | <i>-.20</i> | <i>17.61</i> | <i>✓</i> | <i>3</i> |
| | <i>SV 9383</i> | <i>0</i> | | | | | |
| | <i>R 11499</i> | <i>x 14.78</i> | <i>26.0</i> | <i>-.22</i> | <i>14.76</i> | | |
| <i>600</i> | <i>NZ 165868</i> | <i>0</i> | <i>25.0</i> | <i>-.32</i> | <i>9.5</i> | | |
| | <i>R 11497</i> | <i>x 9.86</i> | <i>25</i> | <i>-.35</i> | <i>9.51</i> | | |
| <i>1200</i> | <i>SV 9383</i> | <i>0</i> | | | <i>6.17</i> | <i>✓</i> | <i>3</i> |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------------|-----------------|---------------|-------------|-------------|-------------|-----------|
| <i>1800</i> | <i>NZ 20876</i> | | | <i>-.51</i> | <i>4.37</i> | |
| | <i>R 11500</i> | <i>x 4.78</i> | <i>25.0</i> | <i>-.41</i> | <i>4.37</i> | |
| | <i>NZ 20876</i> | <i>0</i> | <i>26.0</i> | <i>-.46</i> | <i>4.17</i> | |
| | <i>R 11498</i> | <i>x 4.61</i> | <i>25.0</i> | <i>-.40</i> | <i>4.21</i> | |

Color of water:

Transparency:

REMARKS:

11-5314

Color of water

Drift SE 7.5 mi
under pilotage
under pilotage

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|----------------|-------|------|----|-------|
| | | Down | Up | |
| 7/11 " 300m" 2 | | | | |

11-46514

NOTES

Station No. C 20029 Date: Nov. 25 1917

Hour: 7:00 A. M. to 8:40 A. M. Drift 5.81 E 2.40 N

Position: Lat. From 24° 24' 00" Long. 83° 18'
To 24° 22' 00" 83°

Locality:

Depth: 16 meters Bottom: wh. M. Sample:

Wind: Direction, Force, 1 Alf 76 = 24.44

Sea: 0 north Sky:

TEMPERATURES

| Depth | Thermometer
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|------------|-----------------------------|----------------|---------------|-----------------|--------------------|-----------|----------------|
| | <u>P.S. #</u> | <u>26.7</u> | | | <u>26.7</u> | | <u>GP #</u> |
| <u>50</u> | <u>NZ 20876</u> | <u>0</u> | | | | | |
| | <u>R 11498</u> | <u>x 25.84</u> | <u>25.0</u> | <u>-0.1</u> | <u>25.83</u> | | |
| <u>100</u> | <u>NZ 20872</u> | <u>0</u> | | | | | |
| | <u>R 11500</u> | <u>x 20.15</u> | <u>25.0</u> | <u>-1.3</u> | <u>20.02</u> | | |
| | <u>NZ 165868</u> | <u>16.05</u> | <u>25.0</u> | <u>-0.28</u> | <u>15.77</u> | | |
| | <u>R 11497</u> | <u>x 15.98</u> | <u>25.0</u> | <u>-0.24</u> | <u>15.74</u> | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water: Blue Transparency:

REMARKS:

191 /

Drift 25 F 25100

Locality: S of Highway 40 km Chart C-65 100

Depth: 87 meters Bottom: m M Sample: 11275

Sea: _____ Sky: _____

TEMPERATURES

[illegible]

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |

Transparency:

REMARKS: 1. 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th, 31st, 32nd, 33rd, 34th, 35th, 36th, 37th, 38th, 39th, 40th, 41st, 42nd, 43rd, 44th, 45th, 46th, 47th, 48th, 49th, 50th, 51st, 52nd, 53rd, 54th, 55th, 56th, 57th, 58th, 59th, 60th, 61st, 62nd, 63rd, 64th, 65th, 66th, 67th, 68th, 69th, 70th, 71st, 72nd, 73rd, 74th, 75th, 76th, 77th, 78th, 79th, 80th, 81st, 82nd, 83rd, 84th, 85th, 86th, 87th, 88th, 89th, 90th, 91st, 92nd, 93rd, 94th, 95th, 96th, 97th, 98th, 99th, 100th, 101st, 102nd, 103rd, 104th, 105th, 106th, 107th, 108th, 109th, 110th, 111th, 112th, 113th, 114th, 115th, 116th, 117th, 118th, 119th, 120th, 121st, 122nd, 123rd, 124th, 125th, 126th, 127th, 128th, 129th, 130th, 131st, 132nd, 133rd, 134th, 135th, 136th, 137th, 138th, 139th, 140th, 141st, 142nd, 143rd, 144th, 145th, 146th, 147th, 148th, 149th, 150th, 151st, 152nd, 153rd, 154th, 155th, 156th, 157th, 158th, 159th, 160th, 161st, 162nd, 163rd, 164th, 165th, 166th, 167th, 168th, 169th, 170th, 171st, 172nd, 173rd, 174th, 175th, 176th, 177th, 178th, 179th, 180th, 181st, 182nd, 183rd, 184th, 185th, 186th, 187th, 188th, 189th, 190th, 191st, 192nd, 193rd, 194th, 195th, 196th, 197th, 198th, 199th, 200th, 201st, 202nd, 203rd, 204th, 205th, 206th, 207th, 208th, 209th, 210th, 211th, 212th, 213th, 214th, 215th, 216th, 217th, 218th, 219th, 220th, 221st, 222nd, 223rd, 224th, 225th, 226th, 227th, 228th, 229th, 230th, 231st, 232nd, 233rd, 234th, 235th, 236th, 237th, 238th, 239th, 240th, 241st, 242nd, 243rd, 244th, 245th, 246th, 247th, 248th, 249th, 250th, 251st, 252nd, 253rd, 254th, 255th, 256th, 257th, 258th, 259th, 260th, 261st, 262nd, 263rd, 264th, 265th, 266th, 267th, 268th, 269th, 270th, 271st, 272nd, 273rd, 274th, 275th, 276th, 277th, 278th, 279th, 280th, 281st, 282nd, 283rd, 284th, 285th, 286th, 287th, 288th, 289th, 290th, 291st, 292nd, 293rd, 294th, 295th, 296th, 297th, 298th, 299th, 300th, 301st, 302nd, 303rd, 304th, 305th, 306th, 307th, 308th, 309th, 310th, 311th, 312th, 313th, 314th, 315th, 316th, 317th, 318th, 319th, 320th, 321st, 322nd, 323rd, 324th, 325th, 326th, 327th, 328th, 329th, 330th, 331st, 332nd, 333rd, 334th, 335th, 336th, 337th, 338th, 339th, 340th, 341st, 342nd, 343rd, 344th, 345th, 346th, 347th, 348th, 349th, 350th, 351st, 352nd, 353rd, 354th, 355th, 356th, 357th, 358th, 359th, 360th, 361st, 362nd, 363rd, 364th, 365th, 366th, 367th, 368th, 369th, 370th, 371st, 372nd, 373rd, 374th, 375th, 376th, 377th, 378th, 379th, 380th, 381st, 382nd, 383rd, 384th, 385th, 386th, 387th, 388th, 389th, 390th, 391st, 392nd, 393rd, 394th, 395th, 396th, 397th, 398th, 399th, 400th, 401st, 402nd, 403rd, 404th, 405th, 406th, 407th, 408th, 409th, 410th, 411th, 412th, 413th, 414th, 415th, 416th, 417th, 418th, 419th, 420th, 421st, 422nd, 423rd, 424th, 425th, 426th, 427th, 428th, 429th, 430th, 431st, 432nd, 433rd, 434th, 435th, 436th, 437th, 438th, 439th, 440th, 441st, 442nd, 443rd, 444th, 445th, 446th, 447th, 448th, 449th, 450th, 451st, 452nd, 453rd, 454th, 455th, 456th, 457th, 458th, 459th, 460th, 461st, 462nd, 463rd, 464th, 465th, 466th, 467th, 468th, 469th, 470th, 471st, 472nd, 473rd, 474th, 475th, 476th, 477th, 478th, 479th, 480th, 481st, 482nd, 483rd, 484th, 485th, 486th, 487th, 488th, 489th, 490th, 491st, 492nd, 493rd, 494th, 495th, 496th, 497th, 498th, 499th, 500th, 501st, 502nd, 503rd, 504th, 505th, 506th, 507th, 508th, 509th, 510th, 511th, 512th, 513th, 514th, 515th, 516th, 517th, 518th, 519th, 520th, 521st, 522nd, 523rd, 524th, 525th, 526th, 527th, 528th, 529th, 530th, 531st, 532nd, 533rd, 534th, 535th, 536th, 537th, 538th, 539th, 540th, 541st, 542nd, 543rd, 544th, 545th, 546th, 547th, 548th, 549th, 550th, 551st, 552nd, 553rd, 554th, 555th, 556th, 557th, 558th, 559th, 560th, 561st, 562nd, 563rd, 564th, 565th, 566th, 567th, 568th, 569th, 570th, 571st, 572nd, 573rd, 574th, 575th, 576th, 577th, 578th, 579th, 580th, 581st, 582nd, 583rd, 584th, 585th, 586th, 587th, 588th, 589th, 590th, 591st, 592nd, 593rd, 594th, 595th, 596th, 597th, 598th, 599th, 600th, 601st, 602nd, 603rd, 604th, 605th, 606th, 607th, 608th, 609th, 610th, 611th, 612th, 613th, 614th, 615th, 616th, 617th, 618th, 619th, 620th, 621st, 622nd, 623rd, 624th, 625th, 626th, 627th, 628th, 629th, 630th, 631st, 632nd, 633rd, 634th, 635th, 636th, 637th, 638th, 639th, 640th, 641st, 642nd, 643rd, 644th, 645th, 646th, 647th, 648th, 649th, 650th, 651st, 652nd, 653rd, 654th, 655th, 656th, 657th, 658th, 659th, 660th, 661st, 662nd, 663rd, 664th, 665th, 666th, 667th, 668th, 669th, 670th, 671st, 672nd, 673rd, 674th, 675th, 676th, 677th, 678th, 679th, 680th, 681st, 682nd, 683rd, 684th, 685th, 686th, 687th, 688th, 689th, 690th, 691st, 692nd, 693rd, 694th, 695th, 696th, 697th, 698th, 699th, 70

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|----------------------------|-------------|-------|-------|-------|
| | | Down | Up | |
| 9' Ag frame (about 300 ft) | 1000 - 1100 | 11:00 | 11:15 | |

11—5314

NOTES

with molluscs, worms, schistosomes.

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|--------------|-------|-------|-------|-------|
| | | Down | Up | |
| 1000 ft. net | 1000 | | | |
| 2000 ft. net | 2000 | 10:00 | 11:30 | |
| 3000 ft. net | 3000 | 10:00 | 11:30 | |
| 4000 ft. net | 4000 | 10:50 | 11:30 | |

11-5314

NOTES

Net was set at 1000 ft. and 30 min.

Net was set at 2000 ft. and 30 min.

Net was set at 3000 ft. and 30 min.

1917

Position: Lat. $24^{\circ} 24' 30''$ N Long. $81^{\circ} 3$

Depth: Bottom: pr M Sample: 11290

Sea: Sky:

TEMPERATURES

[illegible]

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |

Transparency:

11—5118

NETS, ETC., USED

[illegible]

11—5314

NOTES

Chimp, Travel, toward by motor launch, in

Result:

Shirley, 12/11/1961

... ..

1. *Journal of Management Studies*, 1997, 34, 1, 1-14.

1. *Chlorophyll a* (Chl a) and *Chlorophyll b* (Chl b) are the two main photosynthetic pigments in green plants. They are responsible for capturing light energy and converting it into chemical energy through the process of photosynthesis. Chl a is the primary pigment, while Chl b acts as an accessory pigment, transferring energy to Chl a.

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

10. *Chlorophyll a* and *Chlorophyll b* content of the leaves was determined by the method of Arnon (1949).

(2) (6) $\text{H}_2\text{O} + \text{H}_2\text{O} \rightarrow \text{H}_3\text{O}^+ + \text{OH}^-$

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 1, 1861. It is a copy of the original letter, and is signed by Abraham Lincoln.

1. *Journal of the American Medical Association*, 1997; 277: 1039-1043.

1

References

[illegible]

with k nodes

(2) $\frac{1}{2} \leq \alpha < 1$.

Introduction

Station No. *C 20033* Date: *Dec 5*

Date: Dec 5

191?

Hour: . M. to . M.

Position: Lat. _____ Long. _____

Locality: Fernandina Is., Fla.

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

[illegible]

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |

Color of water:

Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|-------|------|----|-------|
| | | Down | Up | |
| 35' shrimp trawl
(from motor launch) | | | | |

11-5314

NOTES

During the afternoon with the motor launch, the 35' shrimp trawl was towed a few times near the entrance of the harbor.

Many invertebrates were taken, as well as many fishes, representing the following named genera of the family Sciaenidae:

Leiostomus
Stellifer
Leiostomus
Menticirrhus

Station No. *C 70034* Date: *Dec 8* 191*7*

Hour: *11:50 P.* M. to *12:10 P.* M.

Position: Lat. *36° 50' N* Long. *122° 10' W*
Chart C & G S. 1007

Locality: *off Cape Mendocino, Calif.*

Depth: *13 m* Bottom: *H. M.* Sample: *711298*

Wind: Direction, *SE X S* Force, *1 1/2*
Air 74 = 23.33

Sea: *smooth* Sky: *light clouds*

TEMPERATURES

| Depth | Thermometer
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|----------------|-----------------------------|-------------|---------------|-----------------|--------------------|-----------|----------------|
| <i>surface</i> | <i>B. S. #</i> | <i>18.4</i> | | | | | <i>6.5</i> |
| <i>0</i> | <i>Tyco</i> | <i>65.0</i> | | <i>-1.0</i> | <i>17.7</i> | | |
| <i>10</i> | <i>NZ 20876</i> | <i>61.4</i> | | | | <i>✓</i> | <i>5</i> |
| | <i>11495</i> | <i>18.4</i> | | <i>-1.0</i> | <i>17.4</i> | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water: Transparency:

REMARKS: *Elect. obs. made on land*

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|----------------------------|-------|-------|-------|-------|
| | | Down | Up | |
| Bottom net (20 min 30 min) | 611m | 12:15 | 12:45 | |
| 6 meter | 0 | 12:20 | 12:50 | |

11-5314

NOTES

All nets towed 30 min

Still net. ...

Station No. *C-20035*Date: *Dec 7*191 *7*Hour: *7:52* A.M. to *1:30* P.M.*from 32-10-00**Towed N 24 W*Position: Lat. *To 32-11-01* Long. *79-07**6.5 mi**Chart C & GS 1001*Locality: *100 fms. in, off Charleston*Depth: *2111*Bottom: *gn M, S*Sample: *FT 1124*Wind: Direction, *S*Force, *2**Air 75 = 23.89*Sea: *Choppy*Sky: *cloudy, shower*

TEMPERATURES

| Depth | Thermometer
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------------|-----------------------------|--------------|---------------|-----------------|--------------------|-----------|----------------|
| <i>Surf</i> | <i>B 5.8</i> | <i>23.1</i> | | | | | <i>B</i> |
| <i>0</i> | <i>14922</i> | <i>22.5</i> | | | | | |
| <i>50</i> | <i>NZ 4141</i> | <i>22.62</i> | <i>23.5</i> | <i>-17</i> | <i>22.05</i> | | <i>6</i> |
| | <i>R 11497</i> | <i>22.53</i> | <i>23</i> | <i>-11</i> | <i>22.42</i> | | |
| <i>100</i> | <i>NZ 20874</i> | <i>6</i> | | | | | <i>✓ 1</i> |
| | <i>R 11499</i> | <i>15.71</i> | | <i>-12</i> | <i>14.59</i> | | |
| <i>150</i> | <i>NZ 20872</i> | <i>6</i> | | | | | <i>✓ 4</i> |
| | <i>R 11500</i> | <i>14.57</i> | | <i>-17</i> | <i>14.28</i> | | |
| <i>200</i> | <i>NZ 20876</i> | <i>6</i> | | | | | <i>✓ 2</i> |
| | <i>R 11498</i> | | | <i>-20</i> | <i>14.21</i> | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water:

Transparency:

REMARKS: *Charted, surface temp*

11-5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|--|--------|-------|-------|-------|
| | | Down | Up | |
| 5' - no bottom (bottom not reached) | bottom | 7:20 | 7:50 | |
| 2' - florence (bottom not reached) | bottom | 11:20 | 11:30 | |
| 75' - 110' - 120' - 130' - 140' - 150' - 160' - 170' - 180' - 190' - 200' - 210' - 220' - 230' - 240' - 250' - 260' - 270' - 280' - 290' - 300' - 310' - 320' - 330' - 340' - 350' - 360' - 370' - 380' - 390' - 400' - 410' - 420' - 430' - 440' - 450' - 460' - 470' - 480' - 490' - 500' - 510' - 520' - 530' - 540' - 550' - 560' - 570' - 580' - 590' - 600' - 610' - 620' - 630' - 640' - 650' - 660' - 670' - 680' - 690' - 700' - 710' - 720' - 730' - 740' - 750' - 760' - 770' - 780' - 790' - 800' - 810' - 820' - 830' - 840' - 850' - 860' - 870' - 880' - 890' - 900' - 910' - 920' - 930' - 940' - 950' - 960' - 970' - 980' - 990' - 1000' | 0 | 11:45 | 12:30 | |

11-5314

NOTES

In trawl towed 25 min.
haul - florence, few crustaceans
and mollusks

Obtained towed 2 hours
haul, few mollusks, bottom
few squid, 3 fishes

Purpan nets towed 45 min.
haul fine - micro

Hauls of the 5' In and the other trawl
showing a very barren bottom - the
bottom possibly is sand

The drag in the florence bottom towed
in 87 m, and in 80 fms

Station No. C 20136

Date: May 11

191

Hour: 5:30 A. M. to 10:10 A. M. (Time approx. etc.)

Position: Lat. 00 Long. 00

Chail 5165 1001

Locality: Lie 2 Cape Fern

Depth: 6 fms Bottom: Sample: 10 meters

Wind: Direction, NW Force, 1

Air 711 = 23.33 C

Sea: smooth Sky: cloudy

TEMPERATURES

| Depth | Thermometer
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|-----------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| 0 | B. C. # | 15.3 | | | | | 6137 |
| 0 | Taylor 2 | 59.5 | | 0 | 59.5 | ✓ | |
| 10 | 11497 | 14.70 | 17.0 | -1.8 | 11.5 | | 6 |
| | 11497 | 14.55 | 17.0 | -0.8 | 11.47 | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water:

Transparency:

REMARKS:

11-5314

Station No. 12237

Date: Dec 12

1917

Hour: 5:55 P. M. to 9:05 P. M.

Position: Lat. ^{Towed N 6.7 mi} 33° 41' 00" Long. 76° 41' 00"

Locality: Chart 1465 1001

Depth: ^{116 fms} 210 m Bottom: S, sh Sample: —

Wind: Direction, Sx E 6 SE Force, 3-4

Sea: heavy Sky: partly cloudy Air 74° = 23.33

TEMPERATURES

| Depth | Thermometer —
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|-------------------------------|--------------|---------------|-----------------|--------------------|-----------|----------------|
| 0 | Tyros 2 | 22.2
72.0 | — | -0.5 | 71.5 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |

Color of water:

Transparency:

REMARKS: Chart 1465, map for local

11-5314

NETS, ETC., USED

| Description | Depth
meters | TIME | | Speed |
|--|------------------|--------------|------|-------|
| | | Down | Up | |
| 75 fms. Herring Trawl
reel out 325 fms. | 210
to
110 | P.M.
6:10 | 9:05 | |

11—5314

NOTES

11-5314 NOTES
Trawl towed 1 hr 45 min

Haul - probably containing several
specimens of *B. longicauda*
B. longicauda (common)
1 *B. longicauda*?
C. longicauda

n. ornata TT 11304

2102 JOURNAL OF CLIMATE

Centrostoma elongata 11305

Аморфной? 11307

Station No. *C 2131*Date: *Dec 1*191 *7*Hour: *8:45 A* . M. to *—* . M.Position: Lat. *34° 34' 30" N* Long. *76° 26' 30" W*
*Atlantic*Locality: *Cape Cod*
*Chart C 165 1001*Depth: *19 fms* Bottom: *—* Sample: *—*
*16 meters*Wind: Direction, *S* Force, *1*
*115 69 = 20.56*Sea: *—* Sky: *—*

TEMPERATURES

| Depth | Thermometer -
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-----------|-------------------------------|--------------|---------------|-----------------|--------------------|-----------|----------------|
| <i>0</i> | <i>Tyco 2</i> | <i>57.5</i> | | <i>0</i> | <i>57.5</i> | | <i>CB</i> |
| <i>15</i> | <i>112 145868</i> | <i>13.06</i> | <i>17.0</i> | <i>-17</i> | <i>1.17</i> | | |
| | <i>112 145868</i> | <i>13.30</i> | <i>15.0</i> | <i>-17</i> | <i>1.13</i> | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water:

Transparency:

REMARKS: *Temp. 100 fms. 1.17*

11-5311

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|-------------|-------|------|----|-------|
| | | Down | Up | |
| | | | | |

11-5314

NOTES

Motor boat sent deep 2 1/2 fms
to the bottom of the channel.
Net was returned at 11:46 am
with 12 fish.

Station No. *C21039*Date: *Dec 13*

1917

Hour: *5:45 P.* M. to *11:15 P.* M.Position: Lat. *34° 47' 30"* Long. *75° 17' 30"*
TOW + DRIFT N 46 E 31.3 mi

Locality:

*Chart C & GS 1001*Depth: *316 m*Bottom: *—*

Sample:

Wind: Direction, *S*Force, *4*Sea: *Heavy*Sky: *cloudy (rain)*

TEMPERATURES

| Depth | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|------------|------------------------------|--------------|---------------|-----------------|--------------------|-----------|----------------|
| <i>15</i> | <i>B S.</i> | <i>25.0</i> | | | | | <i>GP*</i> |
| <i>0</i> | <i>Zgros 2</i> | <i>77.0</i> | | <i>0</i> | <i>77.0</i> | ✓ | |
| <i>50</i> | <i>NZ 11498</i> | <i>24.0</i> | | <i>-1.1</i> | <i>22.9</i> | ✓ | <i>6</i> |
| | <i>R 11497</i> | <i>22.5</i> | | <i>-1.1</i> | <i>21.4</i> | | |
| <i>100</i> | <i>NZ 20874</i> | <i>20.0</i> | | | | ✓ | <i>1</i> |
| | <i>R 11497</i> | <i>22.1</i> | | <i>-1.1</i> | <i>21.0</i> | | |
| <i>175</i> | <i>NZ 20872</i> | <i>19.0</i> | | | | ✓ | <i>4</i> |
| | <i>R 11498</i> | <i>23.0</i> | | <i>-1.1</i> | <i>21.9</i> | | |
| <i>316</i> | <i>R 11498</i> | <i>12.39</i> | <i>23.0</i> | <i>-1.1</i> | <i>12.17</i> | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water:

Transparency:

REMARKS:

11-5314

Winc (bottles) < 15°

NETS, ETC., USED

| Description | Depth
meters | TIME | | Speed |
|-----------------------------|-----------------|---------|------|-------|
| | | Down | Up | |
| 75' plankton haul
2007-0 | 2007-0 | 7:30 PM | 8:15 | |
| 112 meters | 0 | 7:30 | 8:15 | |

11-5314

NOTES

75' plankton haul 2007-0
Haul made at 7:30 PM, 112 meters
bottom: Pds at 10:30 PM
Haul made at 7:30 PM, 112 meters
bottom: Pds at 10:30 PM
Haul made at 7:30 PM, 112 meters
bottom: Pds at 10:30 PM

Station No. 25040

Date: Dec 11

191

Hour: 9:10 A. M. to . M.

Position: Lat. 35° 16' 30" N Long. 75° 25' 00"

Locality: Cape Hatteras
Chart C + GS 1001

Depth: 17 fms Bottom: gy S. N Sample: —

Wind: Direction, S W Force, 2

Air 66 = 18.89 C

Sea: choppy Sky: cloudy

TEMPERATURES

| Depth
meters | Thermometer
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-----------------|-----------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| 0 | B.S. # | 12.8 | | | | | GB# |
| 0 | Tyco 2 | 55.0 | | 0 | 55.0 | ✓ | |
| 18 | 112 15615 | 13.10 | 15.0 | -.10 | 13.00 | | |
| | R 11497 | 13.31 | 15.0 | -.07 | 13.24 | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water:

Transparency:

REMARKS:

Under way at anchorage (7:15 am)

11-5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|-------------|-------|------|----|-------|
| | | Down | Up | |
| | | | | |

11-5314

NOTES

Station No. *C-20041* Date: *July 20* 191*7*

Hour: *2.35* A. M. to *7.12* A. M.

Position: Lat. *from 37-10-00* Long. *71-26-30*

Locality: *Chart NO 1411* *Ex. route May 1917*

Depth: *155.71* Bottom: *—* Sample: *—*

Wind: Direction, *N.N.E* Force, *3*

Air 32 = 0°C

Sea: *Choppy* Sky: *Clear*

TEMPERATURES

| Depth | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------------|------------------------------|-------------|---------------|-----------------|--------------------|-----------|----------------|
| <i>0.0</i> | <i>13.27</i> | <i>37.0</i> | | <i>7.0</i> | <i>3.05</i> | | |
| <i>5.0</i> | <i>R 11496</i> | <i>8.40</i> | <i>2.0</i> | <i>0</i> | <i>6.40</i> | | |
| <i>10.0</i> | <i>R 11496</i> | <i>8.45</i> | <i>2.0</i> | <i>0</i> | <i>6.45</i> | | |
| <i>15.0</i> | <i>R 11500</i> | <i>8.55</i> | <i>2.0</i> | <i>0</i> | <i>6.55</i> | | |
| <i>20.0</i> | <i>R 11500</i> | <i>8.20</i> | <i>2.0</i> | <i>+11</i> | <i>8.34</i> | | |
| <i>25.0</i> | <i>R 11497</i> | <i>8.00</i> | <i>3.0</i> | <i>+10</i> | <i>8.10</i> | | |
| <i>30.0</i> | <i>R 11497</i> | <i>8.95</i> | <i>3.0</i> | <i>+10</i> | <i>9.05</i> | | |
| <i>35.0</i> | <i>R 11497</i> | <i>8.15</i> | <i>2.0</i> | <i>+11</i> | <i>8.26</i> | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water: Transparency:

REMARKS: *—*

17 111 111

6x

NOTES

11 - 1000 ft. mostly about
 12 miles - 1000 ft. mostly
 13 - 1000 ft. mostly about
 14 - 1000 ft. mostly about
 15 - 1000 ft. mostly about
 16 - 1000 ft. mostly about
 17 - 1000 ft. mostly about
 18 - 1000 ft. mostly about
 19 - 1000 ft. mostly about
 20 - 1000 ft. mostly about
 21 - 1000 ft. mostly about
 22 - 1000 ft. mostly about
 23 - 1000 ft. mostly about
 24 - 1000 ft. mostly about
 25 - 1000 ft. mostly about
 26 - 1000 ft. mostly about
 27 - 1000 ft. mostly about
 28 - 1000 ft. mostly about
 29 - 1000 ft. mostly about
 30 - 1000 ft. mostly about
 31 - 1000 ft. mostly about
 32 - 1000 ft. mostly about
 33 - 1000 ft. mostly about
 34 - 1000 ft. mostly about
 35 - 1000 ft. mostly about
 36 - 1000 ft. mostly about
 37 - 1000 ft. mostly about
 38 - 1000 ft. mostly about
 39 - 1000 ft. mostly about
 40 - 1000 ft. mostly about
 41 - 1000 ft. mostly about
 42 - 1000 ft. mostly about
 43 - 1000 ft. mostly about
 44 - 1000 ft. mostly about
 45 - 1000 ft. mostly about
 46 - 1000 ft. mostly about
 47 - 1000 ft. mostly about
 48 - 1000 ft. mostly about
 49 - 1000 ft. mostly about
 50 - 1000 ft. mostly about
 51 - 1000 ft. mostly about
 52 - 1000 ft. mostly about
 53 - 1000 ft. mostly about
 54 - 1000 ft. mostly about
 55 - 1000 ft. mostly about
 56 - 1000 ft. mostly about
 57 - 1000 ft. mostly about
 58 - 1000 ft. mostly about
 59 - 1000 ft. mostly about
 60 - 1000 ft. mostly about
 61 - 1000 ft. mostly about
 62 - 1000 ft. mostly about
 63 - 1000 ft. mostly about
 64 - 1000 ft. mostly about
 65 - 1000 ft. mostly about
 66 - 1000 ft. mostly about
 67 - 1000 ft. mostly about
 68 - 1000 ft. mostly about
 69 - 1000 ft. mostly about
 70 - 1000 ft. mostly about
 71 - 1000 ft. mostly about
 72 - 1000 ft. mostly about
 73 - 1000 ft. mostly about
 74 - 1000 ft. mostly about
 75 - 1000 ft. mostly about
 76 - 1000 ft. mostly about
 77 - 1000 ft. mostly about
 78 - 1000 ft. mostly about
 79 - 1000 ft. mostly about
 80 - 1000 ft. mostly about
 81 - 1000 ft. mostly about
 82 - 1000 ft. mostly about
 83 - 1000 ft. mostly about
 84 - 1000 ft. mostly about
 85 - 1000 ft. mostly about
 86 - 1000 ft. mostly about
 87 - 1000 ft. mostly about
 88 - 1000 ft. mostly about
 89 - 1000 ft. mostly about
 90 - 1000 ft. mostly about
 91 - 1000 ft. mostly about
 92 - 1000 ft. mostly about
 93 - 1000 ft. mostly about
 94 - 1000 ft. mostly about
 95 - 1000 ft. mostly about
 96 - 1000 ft. mostly about
 97 - 1000 ft. mostly about
 98 - 1000 ft. mostly about
 99 - 1000 ft. mostly about
 100 - 1000 ft. mostly about

Station No. 1500 Date: Dec 20 1911

Hour: 9:25 P.M. to 1:00 A.M. TOW N80E 6 mi

Position: Lat. 39-01-00 Long. 72-10-00

Locality: Chart H.O. 1411

Depth: 100 M. Bottom: Sh Sample:

Wind: Direction, NW Force, 1 Air 37.2
Sea: Sky:

TEMPERATURES

| Depth | Thermometer
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|-----------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| 0 | Igers "C" | 12.0 | | 0 | 5.56 | | 5-2 |
| 20 | N2 2087 | 6.15 | 7.5 | +0.1 | 6.11 | | |
| | R 11498 | x-6.10 | 5.5 | +0.1 | 6.11 | | |
| 50 | N2 20873 | 6.51 | 7.0 | +0.15 | 6.51 | | |
| | R 11504 | 6.55 | 7.0 | +0.15 | 6.55 | | |
| 100 | N2 20875 | 9.50 | 7.0 | +0.15 | 9.50 | | 4 |
| | R 11499 | 9.50 | 7.0 | +0.15 | 9.50 | | |
| 150 | N2 20876 | 10.51 | 5.5 | +0.09 | 10.60 | | 1 |
| | R 11497 | x-10.51 | 5.5 | +0.09 | 10.60 | | |
| 200 | N2 20875 | 8.80 | 5.5 | +0.07 | 8.87 | | 4 |
| | R 11499 | x-8.80 | 5.5 | +0.07 | 8.87 | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water: Transparency:

REMARKS: 200 fathoms

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|-------------------------|-------|-------|-------|-------|
| | | Down | Up | |
| 80' Sub. 200', 105 fms. | | 10:30 | 11:15 | |
| out. | | | | |
| run from 10' to 100' | | 10:30 | 11:15 | |
| 100' to 105 fms. | | " | " | |

11-5311

NOTES

1/2 mile from shore
 Cape Cod
 100' to 105 fms.
 100' to 105 fms.

Station No. *1-20043* Date: *Feb 21, 1920*

Hour: *7.18* A.M. to *10.55* A.M. Tow *SSSE 4 mi*

Position: Lat. *From 39-36-00* Long. *72-04-30*
To 39-30-00 72-00-00

Locality: *Chart H-01411*

Depth: *200 M.* Bottom: *—* Sample: *—*

Wind: Direction, *NE* Force, *2*
Air 40 = 4.44 C
 Sea: *Smooth* Sky: *Clear & Semishiny*

TEMPERATURES

| Depth | Thermometer
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|-----------------------------|--------------|---------------|-----------------|--------------------|-----------|----------------|
| 0 | <i>Tyco "C"</i> | <i>42.0</i> | | <i>0</i> | <i>5.56</i> | | |
| 20 | <i>R 11496</i> | <i>8.57</i> | <i>6.5</i> | | | | <i>1</i> |
| | <i>R 11497</i> | <i>8.55</i> | | | | | |
| 50 | <i>R 11494</i> | <i>8.54</i> | <i>7.5</i> | <i>+0.1</i> | | | |
| | <i>R 11495</i> | <i>8.4</i> | <i>6.00</i> | | | | |
| 100 | <i>NZ 20873</i> | <i>0</i> | | | | | <i>2</i> |
| | <i>R 11498</i> | <i>8.5</i> | <i>5.0</i> | | | | |
| 150 | <i>NZ 20875</i> | <i>0</i> | | | | | <i>4</i> |
| | <i>R 11499</i> | <i>11.25</i> | <i>6.0</i> | <i>+1.0</i> | <i>11.35</i> | | |
| | <i>R 11496</i> | <i>9.9</i> | <i>7.0</i> | <i>0</i> | | | <i>1</i> |
| | <i>R 11497</i> | <i>9.89</i> | <i>10.5</i> | <i>-0.4</i> | <i>9.85</i> | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water: Transparency:

REMARKS: *light sds, snapper lead*

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---------------|-------|-----------|--------|-------|
| | | Down | Up | |
| 20' Code haul | | 4. 11. 10 | 10. 10 | 1/2 |
| 12 hr. 20 x 6 | 0 | 8. 11. 10 | 10. 10 | |

11-5314

NOTES

20' Code haul - 2 hrs.

12 hr. 20 x 6 - 10. 10

From haul -

- 1. 1. 1
- 2. 1. 1
- 3. 1. 1
- 4. 1. 1
- 5. 1. 1
- 6. 1. 1
- 7. 1. 1
- 8. 1. 1
- 9. 1. 1
- 10. 1. 1
- 11. 1. 1
- 12. 1. 1
- 13. 1. 1
- 14. 1. 1
- 15. 1. 1
- 16. 1. 1
- 17. 1. 1
- 18. 1. 1
- 19. 1. 1
- 20. 1. 1
- 21. 1. 1
- 22. 1. 1
- 23. 1. 1
- 24. 1. 1
- 25. 1. 1
- 26. 1. 1
- 27. 1. 1
- 28. 1. 1
- 29. 1. 1
- 30. 1. 1
- 31. 1. 1
- 32. 1. 1
- 33. 1. 1
- 34. 1. 1
- 35. 1. 1
- 36. 1. 1
- 37. 1. 1
- 38. 1. 1
- 39. 1. 1
- 40. 1. 1
- 41. 1. 1
- 42. 1. 1
- 43. 1. 1
- 44. 1. 1
- 45. 1. 1
- 46. 1. 1
- 47. 1. 1
- 48. 1. 1
- 49. 1. 1
- 50. 1. 1
- 51. 1. 1
- 52. 1. 1
- 53. 1. 1
- 54. 1. 1
- 55. 1. 1
- 56. 1. 1
- 57. 1. 1
- 58. 1. 1
- 59. 1. 1
- 60. 1. 1
- 61. 1. 1
- 62. 1. 1
- 63. 1. 1
- 64. 1. 1
- 65. 1. 1
- 66. 1. 1
- 67. 1. 1
- 68. 1. 1
- 69. 1. 1
- 70. 1. 1
- 71. 1. 1
- 72. 1. 1
- 73. 1. 1
- 74. 1. 1
- 75. 1. 1
- 76. 1. 1
- 77. 1. 1
- 78. 1. 1
- 79. 1. 1
- 80. 1. 1
- 81. 1. 1
- 82. 1. 1
- 83. 1. 1
- 84. 1. 1
- 85. 1. 1
- 86. 1. 1
- 87. 1. 1
- 88. 1. 1
- 89. 1. 1
- 90. 1. 1
- 91. 1. 1
- 92. 1. 1
- 93. 1. 1
- 94. 1. 1
- 95. 1. 1
- 96. 1. 1
- 97. 1. 1
- 98. 1. 1
- 99. 1. 1
- 100. 1. 1

Station No. *C-200411* Date: *May 23* 191*2*

Hour: *12:25 P.* M. to *5:00 P.* M.

Position: Lat. *11-07-00 N* Long. *68-03-00*

Locality: *Enronia Hoyle Light*
Chart H 81411

Depth: *1000* Bottom: *gy. m.* Sample: *910*

Wind: Direction, *SSW* Force, *2*

Sea: *Rough* Sky: *Cloudy + rain*

TEMPERATURES

| Depth | Thermometer--
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|-------------------------------|--------------|---------------|-----------------|--------------------|-----------|----------------|
| 0 | <i>Tyco "C"</i> | <i>40.0</i> | | | <i>40.00</i> | | |
| 50 | <i>NZ 20874</i> | <i>9.62</i> | <i>15.0</i> | <i>-1.10</i> | <i>8.52</i> | | <i>6</i> |
| | <i>R11498</i> | <i>9.75</i> | <i>9.0</i> | <i>+1.1</i> | <i>8.64</i> | | |
| 100 | <i>NZ 21575</i> | <i>12.50</i> | <i>10.0</i> | <i>-1.1</i> | <i>11.40</i> | | <i>5</i> |
| | <i>NZ 20872</i> | <i>—</i> | <i>—</i> | <i>—</i> | <i>—</i> | | |
| 200 | <i>NZ 20874</i> | <i>—</i> | <i>—</i> | <i>—</i> | <i>—</i> | | <i>6</i> |
| | <i>R11498</i> | <i>12.50</i> | <i>8.0</i> | <i>-1.1</i> | <i>11.40</i> | | |
| 300 | <i>NZ 20873</i> | <i>—</i> | <i>—</i> | <i>—</i> | <i>—</i> | | <i>2</i> |
| | <i>R11500</i> | <i>10.85</i> | <i>8.0</i> | <i>+1.0</i> | <i>9.85</i> | | |
| 500 | <i>NZ 20874</i> | <i>7.29</i> | <i>9.0</i> | <i>-1.1</i> | <i>6.19</i> | | <i>6</i> |
| | <i>R11498</i> | <i>7.25</i> | <i>8.0</i> | <i>-1.1</i> | <i>6.15</i> | | |
| 1000 | <i>NZ 20873</i> | <i>4.40</i> | <i>9.0</i> | <i>-1.1</i> | <i>3.30</i> | | <i>2</i> |
| | <i>R11500</i> | <i>4.30</i> | <i>8.5</i> | <i>-1.08</i> | <i>3.22</i> | | |
| 1500 | <i>NZ 20873</i> | <i>4.50</i> | <i>8.0</i> | <i>-1.1</i> | <i>3.40</i> | | |
| | <i>R11499</i> | <i>4.08</i> | <i>8.0</i> | <i>-1.07</i> | <i>3.01</i> | | |
| 1800 | <i>NZ 20873</i> | <i>3.70</i> | <i>7.0</i> | <i>-1.0</i> | <i>2.70</i> | | <i>1</i> |
| | <i>R11499</i> | <i>3.72</i> | <i>7.0</i> | <i>-1.08</i> | <i>2.64</i> | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water: Transparency:

REMARKS: *Lucas ph. Dip + d*
Trin at 500 fathoms brown sand, 1st series

11-5314

Station No. *0-50045* Date: *Feb 22* 191*20*

Hour: *5.45* A.M. to *7.45* P.M.

Position: Lat. *41-18-00 N* Long. *68-07-00 W*

Locality: *Chart H.C. 1011*

Depth: *150* meters Bottom: *sh* Sample: *200*

Wind: Direction, *NW* Force, *1*
Air 49 = 9.44 C

Sea: *smooth* Sky: *cloudy*

TEMPERATURES

| Depth | Thermometer
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|------------|-----------------------------|--------------|---------------|-----------------|--------------------|-----------|----------------|
| <i>0</i> | <i>B.S.#</i> | | | | | | <i>G.B.</i> |
| | <i>Igloo "C"</i> | <i>41.0</i> | | <i>0</i> | <i>5.0</i> | <i>✓</i> | |
| | <i>N2 21575</i> | <i>4.60</i> | <i>10.0</i> | <i>-11</i> | <i>4.59</i> | | |
| | <i>R11498</i> | <i>4.70</i> | <i>10.5</i> | <i>-11</i> | <i>4.59</i> | | |
| <i>50</i> | <i>N2 21575</i> | <i>9.80</i> | <i>10.5</i> | <i>-13</i> | <i>9.67</i> | | |
| | <i>N2 21575</i> | <i>9.80</i> | <i>11.0</i> | <i>-16</i> | <i>9.64</i> | | |
| <i>100</i> | <i>N2 20873</i> | <i>—</i> | <i>—</i> | <i>—</i> | | | |
| | <i>R11498</i> | <i>11.0</i> | <i>10.0</i> | <i>-11</i> | <i>10.89</i> | | |
| <i>150</i> | <i>N2 20875</i> | <i>—</i> | <i>—</i> | <i>—</i> | | | |
| | <i>R11499</i> | <i>11.50</i> | <i>9.0</i> | <i>+1.05</i> | <i>11.55</i> | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water: Transparency:

REMARKS: *light sed, p. sample*

NETS, ETC., USED

| Description | Depth
meters | TIME | | Speed |
|---------------------------|-----------------|---------|-------|-------|
| | | Down | Up | |
| Vertical haul 100' - 150' | 150 | 7:14 PM | 7:21 | |
| 100' - 150' | | 7:21 | 7:28 | |
| 100' - 150' | | 7:28 | 7:35 | |
| 100' - 150' | | 7:35 | 7:42 | |
| 100' - 150' | | 7:42 | 7:49 | |
| 100' - 150' | | 7:49 | 7:56 | |
| 100' - 150' | | 7:56 | 8:03 | |
| 100' - 150' | | 8:03 | 8:10 | |
| 100' - 150' | | 8:10 | 8:17 | |
| 100' - 150' | | 8:17 | 8:24 | |
| 100' - 150' | | 8:24 | 8:31 | |
| 100' - 150' | | 8:31 | 8:38 | |
| 100' - 150' | | 8:38 | 8:45 | |
| 100' - 150' | | 8:45 | 8:52 | |
| 100' - 150' | | 8:52 | 8:59 | |
| 100' - 150' | | 8:59 | 9:06 | |
| 100' - 150' | | 9:06 | 9:13 | |
| 100' - 150' | | 9:13 | 9:20 | |
| 100' - 150' | | 9:20 | 9:27 | |
| 100' - 150' | | 9:27 | 9:34 | |
| 100' - 150' | | 9:34 | 9:41 | |
| 100' - 150' | | 9:41 | 9:48 | |
| 100' - 150' | | 9:48 | 9:55 | |
| 100' - 150' | | 9:55 | 10:02 | |
| 100' - 150' | | 10:02 | 10:09 | |
| 100' - 150' | | 10:09 | 10:16 | |
| 100' - 150' | | 10:16 | 10:23 | |
| 100' - 150' | | 10:23 | 10:30 | |
| 100' - 150' | | 10:30 | 10:37 | |
| 100' - 150' | | 10:37 | 10:44 | |
| 100' - 150' | | 10:44 | 10:51 | |
| 100' - 150' | | 10:51 | 10:58 | |
| 100' - 150' | | 10:58 | 11:05 | |
| 100' - 150' | | 11:05 | 11:12 | |
| 100' - 150' | | 11:12 | 11:19 | |
| 100' - 150' | | 11:19 | 11:26 | |
| 100' - 150' | | 11:26 | 11:33 | |
| 100' - 150' | | 11:33 | 11:40 | |
| 100' - 150' | | 11:40 | 11:47 | |
| 100' - 150' | | 11:47 | 11:54 | |
| 100' - 150' | | 11:54 | 12:01 | |
| 100' - 150' | | 12:01 | 12:08 | |
| 100' - 150' | | 12:08 | 12:15 | |
| 100' - 150' | | 12:15 | 12:22 | |
| 100' - 150' | | 12:22 | 12:29 | |
| 100' - 150' | | 12:29 | 12:36 | |
| 100' - 150' | | 12:36 | 12:43 | |
| 100' - 150' | | 12:43 | 12:50 | |
| 100' - 150' | | 12:50 | 12:57 | |
| 100' - 150' | | 12:57 | 1:04 | |
| 100' - 150' | | 1:04 | 1:11 | |
| 100' - 150' | | 1:11 | 1:18 | |
| 100' - 150' | | 1:18 | 1:25 | |
| 100' - 150' | | 1:25 | 1:32 | |
| 100' - 150' | | 1:32 | 1:39 | |
| 100' - 150' | | 1:39 | 1:46 | |
| 100' - 150' | | 1:46 | 1:53 | |
| 100' - 150' | | 1:53 | 2:00 | |
| 100' - 150' | | 2:00 | 2:07 | |
| 100' - 150' | | 2:07 | 2:14 | |
| 100' - 150' | | 2:14 | 2:21 | |
| 100' - 150' | | 2:21 | 2:28 | |
| 100' - 150' | | 2:28 | 2:35 | |
| 100' - 150' | | 2:35 | 2:42 | |
| 100' - 150' | | 2:42 | 2:49 | |
| 100' - 150' | | 2:49 | 2:56 | |
| 100' - 150' | | 2:56 | 3:03 | |
| 100' - 150' | | 3:03 | 3:10 | |
| 100' - 150' | | 3:10 | 3:17 | |
| 100' - 150' | | 3:17 | 3:24 | |
| 100' - 150' | | 3:24 | 3:31 | |
| 100' - 150' | | 3:31 | 3:38 | |
| 100' - 150' | | 3:38 | 3:45 | |
| 100' - 150' | | 3:45 | 3:52 | |
| 100' - 150' | | 3:52 | 3:59 | |
| 100' - 150' | | 3:59 | 4:06 | |
| 100' - 150' | | 4:06 | 4:13 | |
| 100' - 150' | | 4:13 | 4:20 | |
| 100' - 150' | | 4:20 | 4:27 | |
| 100' - 150' | | 4:27 | 4:34 | |
| 100' - 150' | | 4:34 | 4:41 | |
| 100' - 150' | | 4:41 | 4:48 | |
| 100' - 150' | | 4:48 | 4:55 | |
| 100' - 150' | | 4:55 | 5:02 | |
| 100' - 150' | | 5:02 | 5:09 | |
| 100' - 150' | | 5:09 | 5:16 | |
| 100' - 150' | | 5:16 | 5:23 | |
| 100' - 150' | | 5:23 | 5:30 | |
| 100' - 150' | | 5:30 | 5:37 | |
| 100' - 150' | | 5:37 | 5:44 | |
| 100' - 150' | | 5:44 | 5:51 | |
| 100' - 150' | | 5:51 | 5:58 | |
| 100' - 150' | | 5:58 | 6:05 | |
| 100' - 150' | | 6:05 | 6:12 | |
| 100' - 150' | | 6:12 | 6:19 | |
| 100' - 150' | | 6:19 | 6:26 | |
| 100' - 150' | | 6:26 | 6:33 | |
| 100' - 150' | | 6:33 | 6:40 | |
| 100' - 150' | | 6:40 | 6:47 | |
| 100' - 150' | | 6:47 | 6:54 | |
| 100' - 150' | | 6:54 | 7:01 | |
| 100' - 150' | | 7:01 | 7:08 | |
| 100' - 150' | | 7:08 | 7:15 | |
| 100' - 150' | | 7:15 | 7:22 | |
| 100' - 150' | | 7:22 | 7:29 | |
| 100' - 150' | | 7:29 | 7:36 | |
| 100' - 150' | | 7:36 | 7:43 | |
| 100' - 150' | | 7:43 | 7:50 | |
| 100' - 150' | | 7:50 | 7:57 | |
| 100' - 150' | | 7:57 | 8:04 | |
| 100' - 150' | | 8:04 | 8:11 | |
| 100' - 150' | | 8:11 | 8:18 | |
| 100' - 150' | | 8:18 | 8:25 | |
| 100' - 150' | | 8:25 | 8:32 | |
| 100' - 150' | | 8:32 | 8:39 | |
| 100' - 150' | | 8:39 | 8:46 | |
| 100' - 150' | | 8:46 | 8:53 | |
| 100' - 150' | | 8:53 | 9:00 | |
| 100' - 150' | | 9:00 | 9:07 | |
| 100' - 150' | | 9:07 | 9:14 | |
| 100' - 150' | | 9:14 | 9:21 | |
| 100' - 150' | | 9:21 | 9:28 | |
| 100' - 150' | | 9:28 | 9:35 | |
| 100' - 150' | | 9:35 | 9:42 | |
| 100' - 150' | | 9:42 | 9:49 | |
| 100' - 150' | | 9:49 | 9:56 | |
| 100' - 150' | | 9:56 | 10:03 | |
| 100' - 150' | | 10:03 | 10:10 | |
| 100' - 150' | | 10:10 | 10:17 | |
| 100' - 150' | | 10:17 | 10:24 | |
| 100' - 150' | | 10:24 | 10:31 | |
| 100' - 150' | | 10:31 | 10:38 | |
| 100' - 150' | | 10:38 | 10:45 | |
| 100' - 150' | | 10:45 | 10:52 | |
| 100' - 150' | | 10:52 | 10:59 | |
| 100' - 150' | | 10:59 | 11:06 | |
| 100' - 150' | | 11:06 | 11:13 | |
| 100' - 150' | | 11:13 | 11:20 | |
| 100' - 150' | | 11:20 | 11:27 | |
| 100' - 150' | | 11:27 | 11:34 | |
| 100' - 150' | | 11:34 | 11:41 | |
| 100' - 150' | | 11:41 | 11:48 | |
| 100' - 150' | | 11:48 | 11:55 | |
| 100' - 150' | | 11:55 | 12:02 | |
| 100' - 150' | | 12:02 | 12:09 | |
| 100' - 150' | | 12:09 | 12:16 | |
| 100' - 150' | | 12:16 | 12:23 | |
| 100' - 150' | | 12:23 | 12:30 | |
| 100' - 150' | | 12:30 | 12:37 | |
| 100' - 150' | | 12:37 | 12:44 | |
| 100' - 150' | | 12:44 | 12:51 | |
| 100' - 150' | | 12:51 | 12:58 | |
| 100' - 150' | | 12:58 | 1:05 | |
| 100' - 150' | | 1:05 | 1:12 | |
| 100' - 150' | | 1:12 | 1:19 | |
| 100' - 150' | | 1:19 | 1:26 | |
| 100' - 150' | | 1:26 | 1:33 | |
| 100' - 150' | | 1:33 | 1:40 | |
| 100' - 150' | | 1:40 | 1:47 | |
| 100' - 150' | | 1:47 | 1:54 | |
| 100' - 150' | | 1:54 | 2:01 | |
| 100' - 150' | | 2:01 | 2:08 | |
| 100' - 150' | | 2:08 | 2:15 | |
| 100' - 150' | | 2:15 | 2:22 | |
| 100' - 150' | | 2:22 | 2:29 | |
| 100' - 150' | | 2:29 | 2:36 | |
| 100' - 150' | | 2:36 | 2:43 | |
| 100' - 150' | | 2:43 | 2:50 | |
| 100' - 150' | | 2:50 | 2:57 | |
| 100' - 150' | | 2:57 | 3:04 | |
| 100' - 150' | | 3:04 | 3:11 | |
| 100' - 150' | | 3:11 | 3:18 | |
| 100' - 150' | | 3:18 | 3:25 | |
| 100' - 150' | | 3:25 | 3:32 | |
| 100' - 150' | | 3:32 | 3:39 | |
| 100' - 150' | | 3:39 | 3:46 | |
| 100' - 150' | | 3:46 | 3:53 | |
| 100' - 150' | | 3:53 | 4:00 | |
| 100' - 150' | | 4:00 | 4:07 | |
| 100' - 150' | | 4:07 | 4:14 | |
| 100' - 150' | | 4:14 | 4:21 | |
| 100' - 150' | | 4:21 | 4:28 | |
| 100' - 150' | | 4:28 | 4:35 | |
| 100' - 150' | | 4:35 | 4:42 | |
| 100' - 150' | | 4:42 | 4:49 | |
| 100' - 150' | | 4:49 | 4:56 | |
| 100' - 150' | | 4:56 | 5:03 | |
| 100' - 150' | | 5:03 | 5:10 | |
| 100' - 150' | | 5:10 | 5:17 | |
| 100' - 150' | | 5:17 | 5:24 | |
| 100' - 150' | | 5:24 | 5:31 | |
| 100' - 150' | | 5:31 | 5:38 | |
| 100' - 150' | | 5:38 | 5:45 | |
| 100' - 150' | | 5:45 | 5:52 | |
| 100' - 150' | | 5:52 | 5:59 | |
| 100' - 150' | | 5:59 | 6:06 | |
| 100' - 150' | | 6:06 | 6:13 | |
| 100' - 150' | | 6:13 | 6:20 | |
| 100' - 150' | | 6:20 | 6:27 | |
| 100' - 150' | | 6:27 | 6:34 | |
| 100' - 150' | | 6:34 | 6:41 | |
| 100' - 150' | | 6:41 | 6:48 | |
| 100' - 150' | | 6:48 | 6:55 | |
| 100' - 150' | | 6:55 | 7:02 | |
| 100' - 150' | | 7:02 | 7:09 | |
| 100' - 150' | | 7:09 | 7:16 | |
| 100' - 150' | | 7:16 | 7:23 | |
| 100' - 150' | | 7:23 | 7:30 | |
| 100' - 150' | | 7:30 | 7:37 | |
| 100' - 150' | | 7:37 | 7:44 | |
| 100' - 150' | | 7:44 | 7:51 | |
| 100' - 150' | | 7:51 | 7:58 | |
| 100' - 150' | | 7:58 | 8:05 | |
| 100' - 150' | | 8:05 | 8:12 | |
| 100' - 150' | | 8:12 | 8:19 | |
| 100' - 150' | | 8:19 | 8:26 | |
| 100' - 150' | | 8:26 | 8:33 | |
| 100' - 150' | | 8:33 | 8:40 | |
| 100' - 150' | | 8:40 | 8:47 | |
| 100' - 150' | | 8:47 | 8:54 | |
| 100' - 150' | | 8:54 | 9:01 | |
| 100' - 150' | | 9:01 | 9:08 | |
| 100' - 150' | | 9:08 | 9:15 | |
| 100' - 150' | | 9:15 | 9:22 | |
| 100' - 150' | | 9:22 | 9:29 | |
| 100' - 150' | | 9:29 | 9:36 | |
| 100' - 150' | | 9:36 | 9:43 | |
| 100' - 150' | | 9:43 | 9:50 | |
| 100' - 150' | | 9:50 | 9:57 | |
| 100' - 150' | | 9:57 | 10:04 | |
| 100' - 150' | | 10:04 | 10:11 | |
| 100' - 150' | | 10:11 | 10:18 | |
| 100' - 150' | | 10:18 | 10:25 | |
| 100' - 150' | | 10:25 | 10:32 | |
| 100' - 150' | | 10:32 | 10:39 | |
| 100' - 150' | | 10:39 | 10:46 | |
| 100' - 150' | | 10:46 | 10:53 | |
| 100' - 150' | | 10:53 | 11:00 | |
| 100' - 150' | | 11:00 | 11:07 | |
| 100' - 150' | | 11:07 | 11:14 | |
| 100' - 150' | | 11:14 | 11:21 | |
| 100' - 150' | | 11:21 | 11:28 | |
| 100' - 150' | | 11:28 | 11:35 | |
| 100' - 150' | | 11:35 | 11:42 | |
| 100' - 150' | | 11:42 | 11:49 | |
| 100' - 150' | | 11:49 | 11:56 | |
| 100' - 150' | | 11:56 | 12:03 | |
| 100' - 150' | | 12:03 | 12:10 | |
| 100' - 150' | | 12:10 | 12:17 | |
| 100' - 150' | | 12:17 | 12:24 | |
| 100' - 150' | | 12:24 | 12:31 | |
| 100' - 150' | | 12:31 | 12:38 | |
| 100' - 150' | | 12:38 | 12:45 | |
| 100' - 150' | | 12:45 | 12:52 | |
| 100' - 150' | | 12:52 | 12:59 | |
| 100' - 150' | | 12:59 | 1:06 | |
| 100' - 150' | | 1:06 | 1:13 | |
| 100' - 150' | | 1:13 | 1:20 | |
| 100' - 150' | | 1:20 | 1:27 | |
| 100' - 150' | | 1:27 | 1:34 | |
| 100' - 150' | | 1:34 | 1:41 | |
| 100' - 150' | | | | |

Station No. *C-20046* Date: *July 22* 191*2*0

Hour: *10:20* P. M. to *11:40* P. M.

Position: Lat. *41-37-30* N Long. *68-20-30* W

Locality: *Chart 1111*

Depth: *85* meters Bottom: *—* Sample: *—*

Wind: Direction, *NW* Force, *2* Air *39 = 3.89*

Sea: *smooth* Sky: *cloudy*

TEMPERATURES

| Depth
meters | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-----------------|------------------------------|---------------|---------------|-----------------|--------------------|-----------|----------------|
| 0 | <i>R 11498</i> | <i>41.0</i> | <i>—</i> | <i>0</i> | <i>41.00</i> | <i>✓</i> | <i>SP</i> |
| 10 | <i>H2 21574</i> | <i>0-3.39</i> | <i>5.0</i> | <i>-0.06</i> | <i>3.33</i> | <i>✓</i> | <i>—</i> |
| 10 | <i>R 11498</i> | <i>x-3.39</i> | <i>4.5</i> | <i>-0.02</i> | <i>3.37</i> | <i>✓</i> | <i>—</i> |
| 10 | <i>H2 21575</i> | <i>0-4.59</i> | <i>10.0</i> | <i>-0.09</i> | <i>4.50</i> | <i>✓</i> | <i>—</i> |
| 10 | <i>H2 21572</i> | <i>x-4.59</i> | <i>5.0</i> | <i>-0.07</i> | <i>4.52</i> | <i>✓</i> | <i>—</i> |
| 50 | <i>H2 21572</i> | <i>0-7.65</i> | <i>5.0</i> | <i>-0.10</i> | <i>7.55</i> | <i>✓</i> | <i>—</i> |
| 50 | <i>R 11500</i> | <i>x-7.05</i> | <i>4.5</i> | <i>+0.06</i> | <i>7.11</i> | <i>✓</i> | <i>—</i> |
| 50 | <i>H2 21573</i> | <i>0-8.52</i> | <i>5.0</i> | <i>-0.02</i> | <i>8.50</i> | <i>✓</i> | <i>—</i> |
| 1 | <i>R 11199</i> | <i>x-7.95</i> | <i>4.0</i> | <i>+0.08</i> | <i>8.03</i> | <i>✓</i> | <i>—</i> |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Color of water: Transparency:

REMARKS: *Flask bottles used for* *11-5314*

20, 50, 60, 80, 100 fathoms

Electr. snapper lead

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|----------------|-------|-------|-------|-------|
| | | Down | Up | |
| Vertical net | 50 M. | 10.54 | 10.56 | |
| Horizontal net | 600 | 11.00 | 11.00 | |
| " | " | " | " | |
| " | " | " | " | |

11-5314

NOTES

Bottom trawler net towed 30 min.
 All other nets were in operation
 2000 yds. net, 1000 yds. net
 of bottom

Station No. 6-0047 Date: 1912

Hour: 11 . M. to 5 : 45 A . M.

Position: Lat. $21^{\circ} 10' 00''$ N Long. $68^{\circ} 30' 00''$ W

Locality:

Depth: 27 M Bottom: S, Sh Sample: 410

Wind: Direction, *N*

Force,

Sea: slight swell

Sky: Cloudy (sleet on m)

TEMPERATURES

| Depth | Thermometer—
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|------------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| 0 | Tyco "C" | 40.0 | | 0 | 41.44 | ✓ | GP |
| 20 | NZ 21874 | 0 | | | | ✓ | 6 |
| | R 11498 | x | | | | | |
| 50 | NZ 21875 | 0 | | | | ✓ | 5 |
| | NZ 20872 | x | | | | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |

Color of water:

Transparency:

REMARKS: *21.7 m. 1000 fms.*

11—5511

before readings had been recorded. When

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---------------------|-------|------|------|-------|
| | | Down | Up | |
| Vertical beam trawl | 1000 | 5:00 | 5:15 | |
| Beam trawl | 1000 | 5:20 | 5:45 | |
| Beam trawl | | " | " | |
| Beam trawl | | " | " | |

11-5314

NOTES

Bottom : surface to 1000 fms. 20 fms. net only. 2000 fms. net only. 2000 fms. net only. 2000 fms. net only. 2000 fms. net only.

Station No. 520048 Date: 10-10-3 1912

Hour: 10:15 A. M. to 12:30 P. M.

Position: Lat. 21-11-50 N. Long. 158-17-00 W.

Locality:

Depth: 150 M. Bottom: G. M. Sample: 1-1

Wind: Direction, NE Force, 2

Sea: *Blue* Sky: *Blue*

TEMPERATURES

| Depth | Thermometer -
Make and No. | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-------|-------------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| 0 | Tyno "C" | 38.0 | | 0 | 3.33 | ✓ | |
| 50 | NZ 20874 | 3.50 | 4.5 | -.05 | 3.45 | ✓ | 6 |
| | R 11498 | x-3.50 | 4.5 | -.02 | 3.48 | | |
| 75 | NZ 20875 | 3.40 | 3.5 | -.05 | 3.35 | | 6 |
| | R 11499 | x-3.49 | 3.5 | 0 | 3.49 | | |
| 100 | NZ 20873 | 3.60 | 4.5 | -.08 | 3.52 | | 5 |
| | R 11500 | x-3.60 | 4.5 | -.02 | 3.58 | | |
| 150 | NZ 20876 | 4.90 | 4.5 | -.01 | 4.89 | ✓ | 4 |
| | R 11499 | x-4.85 | 4.0 | +0.02 | 4.87 | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|-------|------|------|-----------|-------------|-------|-----------|
| | | | | | | |

Color of water:

Transparency:

REMARKS: Est. Sdr, snap. Cd

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|--------------|-------|-------|-------|-------|
| | | Down | Up | |
| Vertical net | 1100 | 11:15 | 11:25 | |
| Bottom net | | 11:50 | 12:00 | |
| 2 meter net | | 11:50 | | |
| 5 meter net | | 11:55 | | |
| 1/2 meter | | " | " | |

11-5314

NOTES

Vertical scanty

Bottom net rich micro, 1 Medusa
copepods

5 meter net rich micro, copepods, Sagittaria
200 ft net rich micro, copepods

Station No.

Date:

Feb. 23

19120

Hour: 10:00 P

. M. to 11:45 P . M.

Position: Lat.

Long. 109-34-30 W

Locality:

Chart H O 1411

Depth: 242

Bottom: *gus M*

Sample: 740

Wind: Direction, *E*

Force, 4

$$A_{11} - 37 = 2.78$$

Sea: *Choppy*

Sky: cloudy (drizzle)

TEMPERATURES

| Depth
meters | Thermometer—
Make and No.
B.S.# | Reading | Stem
Temp. | Correc-
tion | Corrected
Temp. | W. Sample | Bottle
used |
|-----------------|---------------------------------------|---------|---------------|-----------------|--------------------|-----------|----------------|
| 0 | Tycos "C" | 38.0 | | 0 | 3.33 | ✓ | GB# |
| 20 | NZ 20874 | 0-2.70 | 6.0 | -1.0 | 2.60 | ✓ | L |
| | R11498 | x-2.85 | 6.0 | -0.6 | 2.79 | | |
| 50 | NZ 20874 | 0-2.70 | 3.0 | -0.5 | 2.65 | ✓ | L |
| | R11498 | x-2.80 | 3.0 | -0.1 | 2.79 | | |
| 100 | NZ 21575 | 0-3.00 | 6.0 | -0.3 | 2.97 | ✓ | 5 |
| | NZ 20872 | x-3.25 | 6.5 | -1.3 | 3.12 | ✓ | 5 |
| 150 | NZ 20873 | 0-5.80 | 6.0 | -1.4 | 5.66 | ✓ | 2 |
| | R11500 | x-5.65 | 5.5 | +0.1 | 5.66 | | |
| 200 | NZ 20875 | 0-5.70 | 6.0 | -0.6 | 5.64 | ✓ | 4 |
| | R11499 | x-5.61 | 5.5 | +0.1 | 5.62 | | |

CURRENTS

[illegible]

Color of water:

Transparency:

REMARKS: Elect. dr. snapper lead

11—6314

NETS, ETC., USED

| Description | Depth
Meters | TIME | | Speed |
|-------------------------------|-----------------|----------|-------|-------|
| | | Down | Up | |
| Vertical net | 200-0 | 10:45 PM | 10:49 | |
| Bottom net (all towed 30 min) | 200-0 | 11:01 | 11:40 | |
| Net " all net 150 | 50-0 | 11:05 | — | |
| Surface # 20 | 0 | 10:55 | 11:25 | |
| " 1/2 meter | | | | |

11-5314

NOTES

Bottom, meter & surface nets towed 30 min

Vertical haul fair - copepods, 1 salpa
 Bottom haul rich - micro, copepods, shrimp, isopods, pagittae
 Surface hauls - 1/2 m rich, copepods, micro, shrimp, 1 fish
 #20 - scanty - micro, copepods, 1 fish

Meter net carried - though bottom net came up clear, showing no evidence of having fouled on bottom.

182.8

54.8

5.

242.6

$$\begin{array}{r}
 5 \overline{) 14.55} \\
 \underline{291} \\
 7 \\
 \underline{2619} \\
 32 \\
 \underline{5819}
 \end{array}$$

4 lit out 50
 1 " " to 100
 5 " " " 100
 6 " " " 150